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ABSTRACT

This research report, literature review, and conference report focus on developments and possible future trends in secondary education regarding the world of work and implications of these trends for the preservice preparation and inservice professional development of secondary teachers. The research report presents findings of a project to examine the background characteristics, work experence, extent of contact with the world of work, and attitudes toward work of teachers in secondary schools in Queensland. It also details these teachers' views concerning the role and aims of secondary education, particularly as they relate to preparation for the world of work. The literature review addresses these topics related to the school-work relationship: aims of schooling, dissatisfaction with schools, preparing students for work and adult life, and implications for teacher education. Proceedings of a conference on "Secondary Schools and the World of Work: Implications for Teacher Education" are then provided. Materials include the keynote address, summaries of two discussion groups on the role of secondary schools in preparing students for work and adult life and implications for teacher education, and an overview of the conference discussion that considers the context, purposes of secondary education, the need for change, desirable changes, and teacher education. (YLB)

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ED228407

SECONDARY SCHOOLING

AND THE

WORLD OF WORK

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FOREWORD

This publication is a result of the recognition by the Queensland Board of Secondary School Studies and the Board of Teacher Education of the close interrelationship between developments in the schools and developments in teacher education.

In view of the increasing emphasis on schooling and work, the Boards felt that it was timely to review developments and possible future trends in secondary education and to consider the implications of these trends for the pre-service preparation and in-service professional development of secondary teachers.

Numerous suggestions for desirable developments in the curriculum and organisation of secondary schools are contained in the report, together with some implications for teacher education. These are set against a background of research into the characteristics and attitudes of secondary teachers and a review of recent Australian literature relating schooling and work.

We commend the report to those who have an interest in or a responsibility for secondary schools and teacher education. We hope that it will stimulate further consideration of the relationship between secondary schools and the world of work and of the implications of this relationship for teacher education so that our secondary students may be better prepared to take up their role in adult life and our teachers better prepared to assist them in this process.

J.A. Golding
Chairman,
Board of Secondary School Studies

A.R. MacKee,
Chairman,
Board of Teacher Education

PREFACE

Towards the end of 1980, the Board of Teacher Education undertook a survey of teachers in Queensland secondary schools to ascertain the extent of their contact with the world of work outside the school and to gather their opinions about the school's role in preparing students for the world of work. Following the publication of the results, reactions were sought from many individuals and groups. The Board of Teacher Education and the Board of Secondary School Studies then met to discuss the report together with other recent reports dealing with the school-work relationship, in particular the Queensland Review of School-Based Assessment and the Commonwealth Schools Commission publication Schooling for 15 and 16 Year Olds.

As a result of these discussions, the two Boards agreed to hold a joint conference at which those from the schools, the teacher education institutions and the community could meet to consider the role of schools in preparing students for work and adult life and the implications of developments in secondary schools for teacher education. The conference was held at the Bardon Professional Development Centre on 29 May 1982.

The first section of this report presents the results of the survey of Queensland secondary school teachers. The second section is a summary of some recent Australian literature on the relationship between school and work which was prepared as pre-reading for conference participants. The third section is an account of the conference proceedings, including comment on the areas of major agreement and suggestions for further action. In the final section, the main themes of the previous sections are briefly discussed.

Acknowledgements

The preparation of this publication was undertaken under the guidance of the Research Committee of the Board of Teacher Education. Greg Duck, assisted by Maureen Bella, wrote and edited the report. The report was typed by Jackie Sorensen.

The Board of Teacher Education and the Board of Secondary School Studies would like to acknowledge the assistance given by the following people during the project:

- Representatives from business and industry and teachers who were involved in the initial planning stages of the project.
- Teachers who willingly replied to questionnaires and so provided the information on which Section 1 of the report is based.
- Don Anderson, the conference keynote speaker, whose opening address provided a valuable stimulus to conference discussion.
- Group reporters at the conference, who adeptly converted one hour's group discussion into six minute presentations to the conference.
- Conference participants, whose discussions provided the basis for Section 3 of this report.

CONTENTS

SECTION 1: RESEARCH REPORT – SECONDARY SCHOOLS AND THE WORLD OF WORK: The Opinions and Experiences of Queensland Teachers

Introduction	1
Background Characteristics	3
Work Experience Other than Teaching	9
Teacher and Class Contact with the World of Work	14
The Role of Secondary Schools in Preparing Students for the World of Work	18
Reported Teacher Attitudes Towards Work	24
Conclusions	26
References	28

SECTION 2: LITERATURE REVIEW – SECONDARY SCHOOLS AND THE WORLD OF WORK: Some Recent Australian Literature

Emergence of Interest in the Topic	31
Aims of Schooling	31
Some Dissatisfaction with Schools	34
Preparing Students for Work and Adult Life: Some Suggestions	38
Implications for Teacher Education	43
References	45

SECTION 3: CONFERENCE REPORT – SECONDARY SCHOOLS AND THE WORLD OF WORK: Implications for Teacher Education

Introduction	49
Keynote Address: The Future of Work by Don Anderson	51
Morning Discussion Groups:	
The Role of Secondary Schools in Preparing Students for Work and Adult Life	58
Afternoon Discussion Groups:	
Implications for Teacher Education	68
Overview of Conference Discussion	78
The Context	78
Purposes of Secondary Education	78
The Need for Change	79
Desirable Changes in Secondary Education	79
Teacher Education	82
Major Points of Agreement	84
Areas for Further Discussion and Investigation	85

SECTION 4: CONCLUDING COMMENTS 89

APPENDICES

Appendix 1	List of Conference Participants	93
Appendix 2	Questionnaire used in Research Project	96
Appendix 3	Membership of Research Committee of the Board of Teacher Education	107

SECTION 1

RESEARCH REPORT

Secondary Schools and The World of Work:
The Opinions and Experiences of Queensland Teachers

INTRODUCTION

Purpose

After a person leaves school, he is likely to spend a substantial part of the remainder of his life in the working world. It is often considered, therefore, that schools have an important role to play in preparing their students to enter and to participate in this world of work outside the school.

In recent years, this aspect of a school's function has been given attention by the media, by certain sections of the community including employers, by government and by educationists. As a result, reports such as those prepared by the Commonwealth/State Working Party on the Transition from School to Work or Further Study have appeared. Similarly, the 1980 conference of the Australian Association for Research in Education had as its theme Youth, Schooling and Unemployment.

In broad terms, the purpose of the research project described in this report is to examine certain aspects of the relationship between secondary schools and the world of work. There are many aspects of this relationship which could have been examined. For example, school to work transition programs, career education programs, work experience for students, employers' expectations of school leavers.

This study focussed on the individual secondary school teacher and his background, experiences and opinions. It sought answers to questions such as: What are the characteristics of secondary teachers in Queensland in terms of sex, age, teaching experience, qualifications and family background? What work experiences outside teaching have they had? How often do they arrange for representatives of the world of work to talk to students in their classes, and how often do teachers visit places of employment with their students? To what extent do they consider secondary schools should prepare students for the world of work? What are their attitudes towards work? What are their opinions about alternative programs of work experience for teachers?

The answers to questions such as these may have implications for both pre-service and in-service teacher education.

Methodology

In the early planning stages of the project, discussions were held between the Board of Teacher Education's Teacher Education Review Committee and a number of secondary teachers and members of business and industry and trade unions. The purpose of these discussions was to try to identify some of the important issues in the relationship between secondary schools and the world of work about which it would be useful to collect information.

A questionnaire for completion by individual secondary school teachers was subsequently developed. Comments on the various drafts of the questionnaire were sought from teacher, union and employer groups. Before the final form of the questionnaire was established, it was trialled in a large Brisbane secondary school.

The broad categories of information sought in the questionnaire were outlined above. A more detailed description of the data sought is given below:

- Sex
- Age
- Type and location of school
- Subjects taught
- Position in school
- Teaching experience
- Qualifications
- Type of secondary school attended
- Parents' education and occupation
- Full-time and part-time work experience, other than teaching

Extent of contact between students and the world of work, as arranged by individual teachers

Constraints to organising more of these visits

The adequacy of the curriculum in preparing students for the world of work

Teachers' attitudes towards work

The aims of secondary education

Teachers' opinions about programs of alternative work experience for teachers.

A random sample of 1 in 15 teachers who were teaching in both government and non-government secondary schools in Queensland was selected for inclusion in the study. Teachers were chosen from the alphabetical list of registered teachers held by the Board of Teacher Education using an equal interval random start method. In this manner, 613 teachers were selected.

In October 1980, questionnaires were forwarded, through the principal, to those teachers chosen in the sample. After a follow-up letter, 483 questionnaires were returned, representing a satisfactory response rate of 79 per cent.

BACKGROUND CHARACTERISTICS

Some general background characteristics of teachers in Queensland secondary schools are presented in this section. They include type and location of school, sex, age, teaching experience, subjects taught, qualifications, secondary school attended and family background. This information was collected firstly, because it is of interest in its own right and secondly, so that responses to later questionnaire items could be analysed in terms of certain of these background characteristics.

Type and location of school

The type and location of the schools in which the respondents to the questionnaire were currently teaching is shown in Table 1.

Table 1: Type and location of current school

Type	**%**
Government	69
Catholic	20
Non-government non-Catholic	11
Location	
Metropolitan	53
Provincial city	26
Country	21

Table 1 shows that over two-thirds of the respondents were teaching in government schools and slightly more than half were in metropolitan schools. For the purposes of this study, Ipswich, Gold Coast and Redcliffe were regarded as metropolitan areas.

Statistics available from the register of teachers, obtained in November 1980, (Board of Teacher Education, 1981) indicate that the proportion of respondents in government and non-government schools closely approximates that for all secondary teachers teaching in Queensland. These population figures show that 69 per cent of registered teachers teaching in secondary schools were in government schools and 31 per cent were teaching in non-government schools.

Age and Sex

There was a slight majority of men in the sample (53 per cent). The population statistics which show that 52 per cent of Queensland secondary teachers are men (Board of Teacher Education, 1981), indicate the representativeness of the sample in terms of sex. Data collected by Bassett (1980) showed that the average proportion of male teachers in Australian secondary schools was 58 per cent.

There was a higher proportion of male teachers in government schools than in non-government schools. The proportion of male teachers in government schools was 55 per cent, in Catholic schools, 44 per cent and in non-government non-Catholic schools, 48 per cent.

The age distribution of the respondents, tabulated against type of secondary school in which teaching, is given below in Table 2.

The data in Table 2 indicate that teachers in secondary schools are relatively young, with nearly half the teachers being 30 years old or less, and only 21 per cent over 40 years old. Again, these figures closely approximate the age distribution of all registered secondary teachers in Queensland (Board of Teacher Education, 1981). The Queensland results with respect to age are similar to the Australian results found by Bassett in his 1979 survey. For example, Bassett found that 52 per cent of secondary teachers were 30 years or less, and that 22 per cent were more than 40 years old.

Table 2: Age of respondents by type of secondary school

Age Group*	Type of secondary school			
	Government	Catholic	Non-govt non-Catholic	Total
	% (N = 332)	% (N = 96)	% (N = 52)	%
Less than 25 years	18	16	6	16
25-30 years	32	26	23	30
31-40 years	32	35	31	33
41-50 years	10	16	21	12
51-60 years	7	4	15	7
Over 60 years	1	3	3	2

* Age group unspecified by three respondents

From Table 2, it can be seen that teachers in non-government schools, and especially non-government non-Catholic schools were older than teachers in government schools. To illustrate, 39 per cent of teachers in non-government non-Catholic schools were over 40 years, whereas 18 per cent of teachers in government secondary schools were over 40.

Another finding of interest with regard to sex and age of teachers was that, on average, male teachers were older than female teachers. Table 3 shows these results.

Table 3: Age by sex of respondents

Age Group	Sex		
	Male	Female	Total
	% (N = 249)	% (N = 231)	%
Less than 25 years	9	23	16
25-30 years	30	30	30
31-40 years	39	26	33
41-50 years	12	12	12
51-60 years	7	8	7
Over 60 years	2	1	2

Table 3 indicates that, while the proportion of teachers who were older than 40 was about the same for both men and women, a larger proportion of women teachers were in the youngest group of less than 25 years.

Teaching Experience

Consistent with the data on age, the results for teaching experience, as shown in Table 4, indicate a relatively inexperienced teaching profession in terms of length of secondary school teaching experience.

The relative inexperience is illustrated by the finding that one-third of the teachers had less than six years' secondary teaching experience, while almost two-thirds had less than eleven years' experience teaching in secondary schools. The pattern of secondary teaching experience of Queensland teachers is very similar to the Australian pattern (Bassett, 1980).

Table 4: Secondary teaching experience

	%
Less than one year	8
1-5 years	25
6-10 years	29
11-20 years	26
More than 20 years	8
Non-response	4

Teachers were also asked to indicate their extent of teaching experience in pre-school, primary, trade or TAFE, tertiary and special education. It was found that about one-quarter of secondary teachers had some primary teaching experience. Very few, however, had taught students in any of the other groups. These results are summarised in Table 5.

Table 5: Proportion of secondary teachers with experience at levels other than secondary

	%
Pre-school	1
Primary	24
TAFE/Trade	4
Tertiary	5
Special	2
Other	4

Current Teaching Situation

Nearly all of the respondents (96 per cent) had regular teaching duties in their school. Nonetheless, there was a substantial number of teachers who were also administrators (7 per cent), subject masters or co-ordinators (20 per cent) or classified themselves in an 'other' category (6 per cent).

The teachers in the sample taught a wide range of subjects. The major curriculum areas of the respondents are shown in Table 6. Respondents were asked to indicate only one major curriculum area.

Table 6: Major curriculum area of secondary school teachers

	%
English	14
Mathematics	13
Sciences (including Chemistry, Physics, Biological Sciences)	16
History	4
Geography	4
Foreign languages	4
Home Economics	8
Commercial Studies	9
Manual Arts	7
Art	3
Physical Education or Health and Physical Education	5

Educational Background

Teachers obtained their initial teaching qualifications in a diverse number of ways. Table 7 shows the type of course, the type of institution and the location of the institution at which they obtained their initial qualification.

Table 7 Initial qualification of secondary teachers

Type of Qualification	%
One-year course	11
Two-year course	23
Diploma of Teaching	21
Pre-service Bachelor of Education	3
Degree only (e.g. Bachelor of Arts)	4
Degree plus Diploma of Education	27
Other	10
Type of institutions at which obtained	**%**
University only	29
College of advanced education or teachers college only	49
Both university and college of advanced education	14
Other	7
Location	**%**
Queensland	79
Interstate	12
Overseas	9

The predominant methods of obtaining initial pre-service teaching qualifications were by a two-year course, a Diploma of Teaching or a degree plus a Diploma of Education or Graduate Diploma of Teaching.

More of the teachers were educated in a teachers college or college of advanced education only, than in a university only or in a combination of the two. Most respondents undertook the majority of their pre-service preparation in Queensland, although a sizeable number undertook it interstate or overseas.

It is of interest to note that a higher proportion of teachers in non-government non-Catholic schools than teachers in government or Catholic schools had attended a university as part of gaining their pre-service qualification - the proportions being 60 per cent, 42 per cent and 41 per cent for non-government non-Catholic, government and Catholic schools respectively.

Also of interest is the finding that a greater proportion of teachers in government schools than in non-government schools received the majority of their pre-service preparation in Queensland. Eighty-seven per cent of teachers in government schools, 57 per cent of teachers in Catholic schools and 73 per cent of teachers in non-government non-Catholic schools undertook the majority of their pre-service preparation in Queensland. The major difference with respect to location of pre-service education among various types of schools was that a large proportion of Catholic and non-government non-Catholic teachers gained their initial qualification interstate. There was little difference in the proportion of each group of teachers educated overseas.

Teachers were asked to indicate the nature of any qualifications, apart from their pre-service teaching qualification, which they had obtained. The most common amongst these were: a Bachelor's degree (other than Education) obtained by 92 teachers, Bachelor of Education or Educational Studies by 48 teachers, a Trade Qualification by 35 teachers, a Diploma or Graduate Diploma by 34 teachers, (including 14 who had completed an upgrading Diploma of Teaching), and a masters degree by 11 teachers.

Table 8 shows details of the secondary school attended by respondents for the majority of their secondary education.

Table 8: Secondary school attended

		%
Type		
	Government	65
	Catholic	21
	Non-government non-Catholic	14
Location		
(i)	Queensland	77
	Interstate	13
	Overseas	10
(ii)	Metropolitan	54
	Provincial city	22
	Country town	24
Mode of attendance		
	As a day student	88
	As a boarder	12
	As an evening student	-
	As a correspondence student	-

It can be seen from the table that the majority of teachers had what might be regarded as a conventional education. Most attended a government secondary school, were educated in Queensland and were day students. It should be noted, nonetheless, that a sizeable proportion undertook the majority of their secondary education either interstate (13 per cent) or overseas (10 per cent).

A crosstabulation of the type of secondary school attended with the type of secondary school in which presently teaching produced the interesting result shown below in Table 9.

Table 9: Current school by secondary school attended

		Current School		
		Government	Catholic	Non-govt non-Catholic
		% (N = 330)	% (N = 95)	% (N = 51)
Secondary* school attended	Government	75	35	53
	Catholic	15	52	6
	Non-government non-Catholic	10	14	41

* Non-respondents = 7

Table 9 shows the tendency for a large number of teachers to return to teach in the same type of secondary school which they attended as a student. Thus, 75 per cent of teachers currently teaching in government schools attended a government secondary school, 52 per cent of teachers in Catholic secondary schools attended a Catholic secondary school as students, and 41 per cent of non-government non-Catholic teachers attended a similar type of secondary school. These figures can be compared with the overall proportion of respondents who attended government, Catholic and non-government non-Catholic secondary schools - 65 per cent, 21 per cent and 14 per cent respectively.

Family Background

It is sometimes said that a large proportion of teachers come from homes in which one or more parents are also teachers. The results of this study indicate, however, that this is not true of teachers in Queensland secondary schools. Only a small proportion of teachers had either a mother (7 per cent) or a father (6 per cent) who had ever been a teacher.

Indeed, the results indicate that teachers have come from a wide variety of family backgrounds. The major occupations in which teachers' fathers were engaged while the teachers were at school are shown in Table 10 below. The occupations were coded using the scheme developed by Broom, Jones and Zubrzycki (1965) with the exception that graziers and other farmers have been combined. Using statistics from the 1966 Census as a reference point, the proportion of the total male Australian workforce is also shown for comparison purposes. These statistics are reported by Broom and Jones (1976). Between 1961 and 1971, this distribution did not change markedly, although a drop in the proportion of farmers and farm workers is noted.

Table 10: Occupations of respondents' fathers and occupational distribution of Australian male workforce - 1966

Occupational Group	Secondary teachers' fathers*	Australian male workforce 1966
	%	%
Professional	17	8
Managerial	15	9
Clerical	18	14
Skilled manual	19	21
Semi-skilled manual	8	21
Unskilled manual	6	16
Graziers and farmers	15	7
Farm and rural workers	3	4

* A reasonably high proportion of teachers (8 per cent) either did not respond to question or gave an uncodeable response. Percentages given are proportion of codeable responses.

Table 10 shows that 17 per cent of secondary teachers were the sons and daughters of professional fathers; 15 per cent of managerial fathers; 18 per cent of clerical fathers; 19 per cent of fathers who were skilled manual workers; and 15 per cent of fathers who were farmers. In terms of the occupational distribution of the Australian male workforce, there was an over-representation of teachers from professional, managerial and farm homes, and an under-representation from homes in which the father was a semi-skilled or unskilled manual worker.

The mothers of 83 per cent of the teachers were engaged in full-time home duties for the majority of time the teachers were attending school as pupils and students.

With respect to educational level obtained by teachers' parents, 47 per cent of the fathers had attended secondary school and a further 15 per cent had a tertiary education. Fifty-six per cent of the mothers had a secondary education, and an additional 7 per cent were tertiary educated.

WORK EXPERIENCE OTHER THAN TEACHING

It has recently been recommended by certain educational inquiries that teachers should spend some time in work other than teaching. For example, the Williams report (Committee of Inquiry into Education and Training, Vol. 3, 1979, p.8) recommended that there should be "opportunities for the short-period release or secondment of teachers to other fields of work". The Select Committee on Education in Queensland (Final Report, p.12) considered that "necessary liaison should be established with the private sector and other Public Service Departments to allow teachers to spend some time working in one of these areas as a normal part of their service". Recommendations of this type are strengthened by the view that teachers have little experience in work other than teaching. To illustrate, the Queensland Economics Teachers Association submission to the Select Committee on Education in Queensland (see Hook, 1980, p.69) claimed that "the majority of teachers have limited or no practical experience outside of educational institutions". By giving teachers alternative work experience, the argument runs, they will be better equipped to teach their students about the types of jobs they may enter after leaving school. Thus, in a submission to a South Australian Working Party employers claimed that -

> teachers should spend some of their time in commerce and industry so that they would be better prepared to advise their students, and would then try to introduce into the curriculum more subjects relating directly to working life. (Report of Working Party on the Transition from Secondary Education to Employment, 1976, p.64).

In the light of the above, it is important to consider firstly the extent of teacher participation in work other than teaching and the types of occupations in which they have been engaged. It is also important to consider teachers' views on alternative programs of work experience for teachers - would they be interested in participating and in what types of occupations would they be interested in gaining experience? This report attempts to answer these two questions. In doing so, it provides information which might be used in planning programs of work experience for teachers or students in teacher education institutions.

An issue which also needs to be carefully considered is not dealt with by this survey. That is, does involving teachers in programs of work experience for teachers make any difference to the way in which they teach their students, and, in particular the way they help their students learn about the world of work outside the school?

Previous Full-time Work Experience

Teachers were asked to indicate the full-time occupations (other than teaching) in which they had been engaged, and the length of time in which they had been involved in each occupation. They were also asked to indicate how long they had spent in each occupation during four different stages of their education - before completing secondary studies, after secondary studies and before teacher training, during teacher training and after completing teacher training.

In all, slightly more than half of the 483 teachers had some previous full-time work experience. The amount of time spent by teachers in other types of work and the period of their careers in which it was spent is given in Table 11 below. Teachers were asked to include vacation employment.

If the "Total" figures in the top row are considered, it can be seen that a large proportion of those who have full-time work experience other than teaching have worked in other occupations for short periods of time. Moreover, including those who have no other work experience, about two-thirds of teachers in Queensland secondary schools have one year or less of full-time work experience in an occupation other than teaching. On the other hand, at least 87 teachers or 18 per cent of total respondents have engaged in other full-time work for a period of more than two years. Of these, most undertook this employment before completing their teacher preparation. Five per cent of Queensland secondary teachers have been engaged in another occupation, full-time, for more than five years.

Table 11: Number of teachers will full-time work experience at various stages of their career

	DURATION						
	3 months or less	4-12 months	1-2 years	2-5 years	More than 5 years	Unspecified	Total
TOTAL*	24	65	26	64	23	43	245
Before completing secondary school	29	13	3	10	3	13	71
Before commencing teacher training	33	26	7	34	15	21	136
During teacher training	26	26	6	4	1	21	84
After teacher training	15	24	14	21	3	15	92
Number without full-time work experience = 238							

* Figures in this row are number of teachers who have had total work experience of various lengths of time. The individual column entries do therefore not sum to the total.

In Bassett's survey of teachers, it was found that 24 per cent of Queensland secondary teachers had at least two years' experience in an occupation other than teaching. It is not possible to directly compare Bassett's results and the findings of the present report for periods of less than two years, as Bassett's report excluded vacation employment while this survey included it. Bearing this in mind, it is significant to note that Bassett found that 66 per cent of Queensland secondary teachers had had no work experience other than teaching (when "nil" and "nil response" are summed). The difference between Bassett's findings and the findings of this report (which show 49 per cent without any full-time work experience) can probably be largely explained in terms of vacation employment. For Australia as a whole, Bassett's results showed 61 per cent of secondary teachers without work experience other than teaching and 27 per cent with more than two years' experience.

It is also of interest to note that 82 teachers were in full-time occupations for more than three months after completing secondary school and before completing teacher training. These might be seen as a group of teachers who did not undertake teacher education in the semester immediately after their secondary education but engaged in some other occupation between the two.

The majority of teachers who were involved in other occupations were employed as:

- clerical and office workers (85 teachers)
- shop assistants (49)
- tradesmen or apprentices (46)
- labourers (28)
- waiters, bar tenders (27)
- farm or rural workers (20)
- members of armed services (18)
- factory workers (15)
- drivers, railway workers (14)
- storemen and packers (11).

Of the above occupations, the only ones which were engaged in by a majority of respondents for more than one year were tradeswork or apprenticeships or military service. These data suggest that the only major groups who switched to teaching after embarking initially on another career were those who were formerly tradesmen or apprentices. For most of the other positions, it appears that many teachers sought positions only on a temporary basis.

Further analysis of the results indicates that the former tradesmen were now mainly manual arts teachers who entered teaching via a special trades entry teacher education course. When the 35 manual arts teachers are removed from the analysis, the number of teachers who have had some full-time work experience falls from 245 to

214. More significantly, the proportion with more than two years' full-time work experience drops from 18 per cent to 13 per cent when the manual arts teachers are excluded.

A breakdown of the major occupations by stage of education at which teachers were involved in them is given in Table 12.

Table 12: Major occupations in which teachers involved

	WHEN INVOLVED			
	Before completing secondary school	Before commencing teacher training	During teacher training	After teacher training
Clerical and office workers	10	43	18	32
Shop assistants	30	16	16	5
Tradesmen or apprentices	5	24	3	5
Labourers	6	13	9	6
Waiters, bar tenders	-	8	15	6
Farm or rural workers	7	7	8	5
Members of armed services	-	3	5	13
Factory workers	4	5	5	3
Drivers, railway workers	2	5	6	3
Storemen and packers	5	6	4	1

The occupation in which teachers were most often involved before secondary school was as shop assistants; before commencing teacher training the most common occupations were clerical and office work, trades or apprenticeships, labouring and as shop assistants; during teacher training they were clerical and office workers, shop assistants and waiters or bar tenders, and after teacher training they were clerical and office workers and members of the armed services.

Comparing length of full-time experience in other occupations among the types of school reveals that a higher proportion of teachers in government and Catholic schools than in non-government non-Catholic schools have had no outside work experience - the proportions being 49 per cent, 55 per cent and 38 per cent respectively. This difference is most marked in the older teachers. Of teachers over 30 years, the proportions with no full-time work experience outside teaching are 43 per cent for government schools, 62 per cent for Catholic schools, and 29 per cent for non-government non-Catholic schools.

Previous Part-time Work Experience

Teachers were asked to indicate the nature of their previous part-time work experience outside teaching in the same manner as they indicated full-time work experience. The results are shown in Table 13.

Table 13 indicates that 65 per cent of Queensland secondary teachers have had some part-time work experience other than teaching. As with involvement of teachers in full-time occupations, the majority of this work experience was undertaken by teachers for short periods of time. Nonetheless, 18 per cent of teachers had been engaged in part-time occupations for more than two years.

Table 13 also shows that a large proportion of future teachers undertook part-time employment during secondary and tertiary studies. A smaller number have undertaken part-time employment after completing their teacher preparation.

Table 13: Number of teachers with part-time work experience at various stages of their career

	DURATION						
	3 months or less	4-12 months	1-2 years	2-5 years	More than 5 years	Unspecified	Total
TOTAL	29	69	37	75	14	90	314
Before completing secondary school	43	31	20	24	3	57	178
Before commencing teacher training	52	11	12	12	-	43	130
During teacher training	24	53	17	30	1	48	173
After teacher training	23	19	5	19	5	23	94
Number without part-time work experience = 169							

The major part-time occupations in which teachers were involved were:

- shop assistants (126 teachers)
- waiters, bar tenders (68)
- clerical and office workers (52)
- labourers (48)
- farm and rural workers (34)
- factory workers (30)
- postal workers (23)
- tutors, workers in education (22).

Opinions concerning involvement in alternative work experience programs for teachers

A large majority of teachers (81 per cent of respondents) were in favour of the proposition that teachers should spend some time in work experience, other than teaching, as part of their normal career pattern. A similar majority (76 per cent of respondents) indicated that they would be prepared to participate in a program of alternative work experience for teachers in an out of school situation for an extended period of several months.

The concept of programs of alternative work experience was equally highly endorsed by teachers in different types of schools, of different ages and teaching various subject areas. The proportion of manual arts and commercial teachers indicating that work experience should be part of a teacher's normal career pattern was, however, somewhat higher than the average - in each case more than 90 per cent endorsed the idea.

Similarly, there was equal willingness on the part of teachers from the different types of schools to participate in a work experience for teachers program. Younger teachers expressed slightly greater readiness to participate in such a program than did older teachers. A very high proportion of manual arts teachers (94 per cent) indicated that they would be willing to be involved in the program.

The major types of occupations in which the teachers indicated that they would be interested in participating were:

- clerical and office work (73 teachers)
- trades (45)
- managerial (42)
- computer programming (32)
- social work/child guidance (25)
- public relations/advertising (22)
- catering (22)
- farming (18)
- architecture, engineering, surveying (17)
- nursing, professional medical work (17).

It is interesting to compare the above list of occupations with those in which teachers had previously participated. While clerical and office work was rated highly in all lists, there was nonetheless a tendency for the occupations in which teachers would be interested in participating to include more professional and skilled occupations.

TEACHER AND CLASS CONTACT WITH WORLD OF WORK

In this section, the number of times which individual teachers organised visits from business firms, industry associations and employee associations to talk to students in their classes, the types of organisations which spoke to children in class, and reasons why more visits were not organised are examined. In addition, the number and nature of visits by the teacher with his classes to places of employment and reasons constraining more of these visits are explored.

In considering the results, it must be recognised that they reflect the amount of contact that the individual teacher with his classes has had with the world of work. The results do not give an account of the amount of student involvement, as part of the school program, with the world of work. A large number of teachers (75 per cent) were in schools in which there was a careers or guidance officer who was responsible for organising visits. In some schools, therefore, it might have been more appropriate for the careers or guidance officer, rather than the individual teacher, to arrange visits to or from organisations outside the school.

Further, the results do not generally show initiatives that have been organised at a school level to promote greater contact between students and the working world. A useful outline of the types of school initiatives implemented in Queensland to help students to enter the world of work can be found in the Report to Schools from the Director's Committee on Secondary Education (Department of Education, 1979). The following programs illustrate the kinds of initiatives which secondary schools have developed to increase student contact with and awareness of the world of work: Work Experience programs, Link courses with TAFE, Career Awareness programs, Youth Employment Training, Job Readiness courses. Interested readers are referred to the Director's Committee Report mentioned above for more detailed information.

Teacher-Initiated Visits from World of Work to Teacher's Classes

The number of times individual teachers were responsible, either directly or through the guidance officer, for organising business firms, industry associations, employee associations or other groups in the workplace to talk to their students was not great. Seventy per cent of teachers had not had any such visits occur, 9 per cent had had one, 8 per cent - two and 6 per cent - three. As pointed out previously, the fact that three-quarters of the teachers were in schools in which there was a careers or guidance officer responsible for organising contact between the school and the working world should be borne in mind when interpreting the results.

There was not a great deal of variation among the different kinds of schools with respect to the number of visits arranged by teachers. Notwithstanding this comment, teachers in Catholic schools tended to arrange slightly more visits than teachers in other schools - 11 per cent of teachers in Catholic schools had arranged for four or more visits compared with 6 per cent of teachers in the other schools.

A comparison of the number of visits for teachers who specified the various curriculum areas as their major teaching field is also of interest. Because the number of teachers indicating any given teaching area is reasonably small, these results must be taken as tentative. The findings are further clouded by the fact that the visits teachers arranged were not necessarily concerned with their major curriculum area, but might have been for classes taken in their second teaching subject. Bearing this in mind, the results tend to indicate that Physical Education (25 teachers total), Art (16), Mathematics (61) and Foreign Language (17) teachers had fewer than average visits, while History (19), Geography (17) and Commercial (41) teachers had more than the average number of visits.

While teachers arranged for a wide variety of organisations to visit their classes, the major ones were:

- government or semi-government organisations (33)
- post-secondary educational institutions (28)
- banks/finance companies (28)
- local businesses/retail sales establishments (25)
- Commonwealth Employment Service (24)
- industrial plants, factories (24)
- insurance companies (20)
- armed services (15).

Teachers were asked to indicate whether they would prefer more of this kind of visit and to indicate the extent to which eight listed reasons constrained more visits taking place. The non-response rate to these questions was rather high, ranging from 9 per cent to 13 per cent. This was largely because some teachers who had not had any visits ignored these questions. In reporting results, the percentages given are the proportion of respondents to the question rather than the total number of teachers who returned questionnaires.

A large majority of teachers (84 per cent) claimed that they would like more members of the world of work to visit students in their classes. While this study cannot provide direct evidence which shows that having these visits is of use to students, the fact that most teachers wanted more gives an indirect indication of their value.

The extent to which teachers saw each of eight listed reasons as a constraint to organising more visits is shown below in Table 14.

Table 14: Reasons constraining more visits from members of working world to classroom

	Very Important %	Moderately Important %	Slightly Important %	Un-important %
School policy	20	22	23	35
Finance	11	20	23	46
Teacher's lack of time	40	32	17	11
Timetabling difficulties	34	37	18	11
Unwillingness of suitable representatives to participate	10	29	32	30
Unavailability of suitable representatives	18	28	30	24
Lack of interest shown by students	10	24	33	32
Lack of interest shown by colleagues	8	22	33	38

It is clear from Table 14 that teachers consider that the major constraints against arranging more visits are the teacher's lack of time and the difficulty of fitting the visits in to the school timetable. All of the other listed reasons were rated as slightly important or unimportant by the majority of respondents.

The answers to this question were analysed by type and location of school. Differences in the responses among government, Catholic and non-government non-Catholic schools were not great. The following differences are, however, highlighted:

- Teachers in Catholic schools reported school policy to be less of a constraint than did teachers in government or other non-government schools - the proportions considering school policy as a very important or moderately important constraint were 31 per cent for Catholic schools, 45 per cent for government schools and 53 per cent for non-government non-Catholic schools.

- Lack of interest shown by students was rated as more important by teachers in government schools than in other schools - the proportions considering this very important or moderately important being 39 per cent for government schools, 26 per cent for Catholic schools and 22 per cent for non-government non-Catholic schools.

- Unavailability of suitable representatives was more important for country teachers (59 per cent rating it as a great or moderate constraint) than provincial city teachers (48 per cent) or metropolitan teachers (39 per cent).

Class Excursions with Teacher to Places of Employment

The level of involvement of teachers in visiting places of employment with their students was similar to that for members of the world of work coming into the classroom. Seventy-one per cent of teachers had not taken their students to any places of employment; 13 per cent had taken them to one; 7 per cent had taken them to two; and 8 per cent of teachers had taken their students to three or more places of employment.

The number of visits was very similar in government, Catholic and non-government non-Catholic schools.

Bearing in mind the caveat issued before, teachers who specified Geography, Home Economics or Commercial studies as their major curriculum area tended to take their students on greater than average number of visits, and teachers of Foreign Languages and Physical Education tended to take their students on fewer than average visits.

The main places visited were:

- industrial plants, factories (71)
- government and semi-government organisations (39)
- local businesses, retail sales establishments (27)
- post-secondary educational institutions (20)
- farms (16).

There was a great deal of support among teachers for more of these visits - well over half of the teachers indicated that they would like to have more visits to the "world of work".

An analysis of visits to the world of work by geographical location of schools revealed that fewer teachers in metropolitan schools than in provincial city schools and fewer teachers in provincial city schools than country schools took their students on such excursions. Seventy per cent of metropolitan teachers, 67 per cent of provincial city teachers and 55 per cent of country teachers made no such visits. It is also interesting to find that a higher proportion of teachers in country schools wanted more excursions to the workplace than did teachers in metropolitan or provincial city schools.

The importance given by teachers to eight listed reasons for not taking their students to more places of employment is shown in Table 15.

Table 15: Reasons constraining more visits to places of employment

	Very Important %	Moderately Important %	Slightly Important %	Un-important %
School policy	27	27	21	25
Finance	27	27	24	22
Teacher's lack of time	43	30	17	10
Timetabling difficulties	43	34	17	6
Unwillingness of suitable organisations to participate	9	26	36	29
Unavailability of suitable organisations	18	28	28	26
Lack of interest shown by students	8	24	29	39
Lack of interest shown by colleagues	7	23	32	38

The non-response rate to this question was quite high - about 18 per cent. There appear to be two reasons for this. As before, some teachers who had not arranged any excursions ignored the question. The number of non-responses was also probably increased because the reasons listed were the same as those listed for not inviting more representatives of the world of work into the classroom. Some teachers may

have felt that they would be duplicating their previous response by answering the question, and so left it unanswered. The percentages reported are of the number of responses to the question.

The teacher's lack of time and timetabling difficulties are the main reasons given by teachers for not organising more visits to places of employment. In addition, slightly more than half of the respondents thought that school policy and finance were very important or moderately important constraints to arranging more excursions. In all other cases, a majority of respondents rated the reasons as slightly important or unimportant.

Responses to this question were analysed by type and geographical location of school. The most striking difference found was that teachers in country schools rated unavailability of suitable organisations as much more important for not organising more visits than did their metropolitan or provincial city counterparts. Sixty-five per cent of teachers in country schools considered unavailability of suitable organisations to be a very or moderately important reason why more excursions to places of employment were not undertaken, and significantly, 37 per cent of country teachers considered this factor very important. The proportion of teachers in metropolitan and provincial city schools who rated unavailability of suitable organisations as a very or moderately important constraint was much lower - 42 per cent and 38 per cent respectively.

The other differences of interest were:

- School policy as a constraint to more visits was considered less important by teachers in Catholic schools - 40 per cent considering it was of great or moderate importance compared with 58 per cent in other schools.

- Lack of interest shown by students was rated more important by teachers in government schools - 36 per cent of these teachers considered that it was very or moderately important compared with 23 per cent of teachers in other schools.

THE ROLE OF SECONDARY SCHOOLS IN PREPARING STUDENTS FOR THE WORLD OF WORK

This section deals with secondary teachers' opinions concerning the aims of secondary education and the adequacy of the curriculum in the various subject areas in preparing students for the world of work.

Aims of Secondary Education

Teachers were asked to rate their level of agreement on a five point scale (strongly agree, agree, undecided, disagree, strongly disagree) that each of 19 items should be a major aim of secondary education. They were also asked to indicate whether the present emphasis on each aim in secondary education in Queensland should be increased, decreased or remain the same.

Items in the list of aims included those that were related to the secondary school's role in preparing students for the world of work. To provide a balance, and to gain some idea of priorities, a second group of items, concerned with what might be regarded as personal development of students was also included. Some items were taken from Henderson's study (1980) on aims of alternative general education courses in Western Australia and from Campbell and Robinson's study (1979) on community beliefs about schooling. Others were written especially for this study.

In order to provide a check that the items were in fact measuring two clusters of aims, a factor analysis was carried out on the responses. Factor analysis is a statistical technique which may be used to explore the way in which items cluster together to form a meaningful set (see Nie et al, 1975, for a detailed explanation of factor analysis). The factor analysis revealed that those items which had been previously designated as reflecting aims of secondary education concerned with personal development did form a factor or meaningful group of items. Those designed to measure aims related more directly to preparing students for the working world tended to split into two clusters. The first of these might be seen as preparation for the world of work in a general way, while the second was more concerned with preparing students for specific types of occupations. One aim (to prepare students to enter tertiary education) did not fall readily into any of the three groups.

Thus, the aims of secondary education reflected in these items would be considered to fall into three clusters - those concerned with personal development of the student, those concerned with preparing students generally for the working world, and those concerned with preparing students for certain types of occupations.

The proportion of respondents agreeing with each aim of secondary education (i.e. agreeing or strongly agreeing) and the proportion favouring an increase are given in Table 16.

Table 16: Proportion of respondents agreeing with each aim of secondary education, and proportion favouring an increase in current emphasis in Queensland secondary schooling

Item No.	Item	Proportion agreeing %	Proportion favouring increase %
13.	Developing in each child a sense of personal worth and esteem	100	82
14.	Teaching students how to co-operate with other people	99	80
3.	Teaching basic literacy and numeracy skills	98	69
4.	Making students aware of different types of jobs/ careers available and what is involved in each one	97	73
17.	Helping students appreciate cultural activities	97	72
18.	Assisting students in forming positive attitudes towards work	97	79

Item No.	Item	Proportion agreeing	Proportion favouring increase
		%	%
1.	Teaching basic problem-solving skills so students are competent to solve problems in a job situation	96	80
11.	Helping students to gain an understanding of the training and educational background required to enter specific occupations	95	69
16.	Assisting students to profitably enjoy their leisure activities	94	69
2.	Teaching students how to go about getting a job (e.g. interview, personal appearance)	93	74
5.	Helping students to understand their future role as members of the workforce	93	74
19.	Preparing students for the possibility of unemployment	91	72
6.	Helping students understand the expectations of employers	91	73
8.	Helping students understand how a business operates	80	50
12.	Preparing students to enter tertiary education	79	26
15.	Helping students to gain an understanding of the type of job they are likely to be doing	79	56
10.	Teaching students about safety in industry	73	48
9.	Helping students to understand the role of managers in business	66	43
7.	Teaching students skills that will be used directly in their jobs	58	40

Examination of Table 16 indicates that teachers strongly endorsed those aims of secondary education concerned with personal development (Items 13, 14, 16, 17, 18, 19) and would also support an increase in emphasis on these aims. More than 90 per cent of respondents thought that each of these six aims should be a major aim of secondary education, and over two-thirds wanted an increase in current practice in Queensland secondary schools on each aim.

Teachers also agreed that secondary schools should aim to help students to prepare for employment and the world of work in a general way (particularly Items 1, 2, 3, 4, 5, 6 and 11) by, for example, "teaching students how to go about getting a job" and "helping students understand their future role as members of the workforce". There was also a consensus that the emphasis on these aims should be increased, with more than two-thirds of respondents indicating that there should be an increase in present emphasis.

The remainder of the aims, while still endorsed by a majority of teachers, were not rated nearly as highly. These items, with the exception of Item 12, might be considered to be related more to preparing students for specific types of employment rather than to the world of work in general. For example, Items 8 and 9 refer specifically to "a business" and Item 10 to "safety in industry". In particular, teachers could not agree that teaching students skills that will be used directly in their job should be a major aim of secondary education. Moreover, there was a lack of consensus among teachers that emphasis on these aims should be increased, the proportion favouring an increase generally being in the 40-50 per cent range.

In general, a reasonably high proportion (79 per cent) of teachers felt that a major aim of secondary education should be to prepare students to enter tertiary education (although this item was not endorsed as highly as items related to personal development or general preparation for the world of work). However, teachers did not consider that there should be any increase in emphasis of this aim of secondary education - only about one-quarter favoured an increase.

It should be noted that, with the exception of Item 12, a very small proportion of teachers thought that the emphasis in current practice on each aim should be decreased. In each case, the proportion of respondents favouring a decrease in emphasis was less than 4 per cent. A slightly higher proportion of teachers (11 per cent) considered that there should be a decrease in emphasis on preparing students for tertiary education.

Further analysis of these results in terms of sex and age of teachers, type of school in which employed (government, Catholic, non-government non-Catholic) and amount of full-time work experience (none, one year or less, more than one year) was undertaken. In all, 152 main effect comparisons were considered. A main effect comparison consists, for example, of comparing the extent of agreement on a particular item for teachers in the various types of school. Of the 152 main effect comparisons, 17 were "significant" in a statistical sense (at the .05 level). In absolute terms, however, most of these differences were quite small. These results therefore generally support a high degree of consistency across the groups of teachers. That is, male and female teachers of all ages, employed in various types of schools and with varying degrees of work experience consider the same aims important for secondary education, and would support any increases on each aim to a similar extent.

Notwithstanding the above, appreciable differences did occur for a small number of items. These concerned varying emphases given to some items by teachers under 25 years and by teachers 25 years or older. In particular, a higher proportion of younger teachers than older teachers agreed that each of the following should be a major aim of secondary education:

- Teaching students skills that will be used directly in their jobs (75 per cent under 25 agreeing; 54 per cent 25 or over agreeing)
- Helping students understand how a business operates (91 per cent under 25 agreeing; 78 per cent 25 or over agreeing).

In addition a higher proportion of younger teachers than older teachers thought that there should be an increase in emphasis on the following aims:

- Helping students understand the expectations of employers (85 per cent under 25 endorsing increased emphasis, 71 per cent 25 years or more endorsing increased emphasis)
- Teaching students about safety in industry (57 per cent vs 46 per cent)
- Assisting students in forming positive attitudes towards work (87 per cent vs 77 per cent).

In summary, the impression gained from these results is that the teaching force strongly supports the idea that secondary schools should promote the personal development of students and should help prepare students for the "world of work" in general. They also endorse an increase in emphasis on these aims. Teachers in general are less enthusiastic about the secondary school helping to prepare students for specific types of jobs, and would not agree that there should be an increase in emphasis on these aims.

These results are generally consistent with those found by Campbell and Robinson (1979) in their survey of teachers, students, parents, business people and unionists. They found that, overall, a higher proportion of respondents agreed that a primary function of schools should be "to develop in each child a sense of personal worth and esteem" than agreed that a primary function of schools should be "to prepare children to enter the workforce". Further, a higher proportion considered that the present emphasis in school practice on the former aim should be increased than did for the latter aim. Campbell and Robinson's study also showed that a higher proportion of students, parents, business people and unionists considered that a primary aim of schools should be to prepare students to enter the workforce. Teachers were also the group who least supported an increase in this aim, while business people were most supportive of an increase.

Reviewing the Australian literature, Sturman (1979) concluded that students themselves considered that they had been given inadequate preparation for the world of work. In particular, students considered that the career education and guidance they had received at school had been of little help in preparing them for the world of work.

Place of Different Curriculum Areas in Preparing Students for the World of Work

Moving from the level of the overall aims of secondary education to specific subjects within the secondary school, teachers were asked whether, for their major subject area, they considered that the curriculum adequately prepared students for the world of work. The results overall, and for the major curriculum areas, are given in Table 17.

Table 17: Proportion of teachers overall and in major curriculum areas who considered that the curriculum adequately prepared students for the world of work

	SUBJECT						
Year Level	Overall	English	Maths	Natural Sciences	Home Economics	Commercial	Manual Arts
	%	%	%	%	%	%	%
Year 8	44	56 (46)	59 (42)	43 (47)	38 (37)	-	35 (34)
Year 9/10	57	73 (59)	60 (50)	46 (52)	57 (37)	68 (38)	56 (34)
Year 11/12	57	53 (51)	63 (43)	37 (53)	72 (25)	57 (30)	79 (24)

(Numbers in brackets represent total number of respondents, for each subject within Year level, to the question.)

In general, and within subject areas, teachers considered that the Year 8 curriculum less adequately prepared students for the world of work than did the curriculum at other Year levels. In reading teachers' comments, however, a large number of teachers considered that Year 8 should not be expected to prepare students for the world of work. Many teachers felt Year 8 should be a consolidation of the work of primary school or a general preparation for the later years of secondary school.

At both Year levels 9/10 and 11/12, all major subject areas, except the sciences, were seen by more than 50 per cent of teachers as adequately preparing students for the world of work. In particular, English and Commercial subjects at the lower secondary level, and Manual Arts and Home Economics at the upper secondary level were considered to be preparing students adequately by a substantial majority of teachers.

Those teachers who said that the curriculum was adequately preparing students for the world of work were asked to indicate in which ways in particular it was doing this. Those who claimed that the curriculum was inadequately preparing students for the world of work were asked to indicate what might be included in the curriculum to more adequately prepare students for the world of work. The results of these open-ended comments for the major curriculum areas are reported briefly below.

English

At the lower secondary level, teachers pointed to the skills of reading, writing, speaking and listening and more specific employment-related skills such as form-filling, letter-writing and interview techniques as being important ways in which the English curriculum helped students enter the world of work. Some teachers also mentioned that a careers unit was incorporated into their program. In the upper secondary school, while basic literacy was still seen as important, there was a tendency for teachers to see the affective aspects of a student's development as related to preparation for the working world. Examples cited included values formation, heightened sensitivity to world around them, emphasis on world issues, self-confidence and understanding of human experience through literature.

Although there was only a weak desire by teachers to have the English curriculum at lower secondary level changed to make it more relevant to the world of work, suggestions for change included introduction of public speaking, values education and literature more closely related to life experiences of the students. It was also suggested that work experience for students could be introduced. In Years 11/12, a number of teachers felt that there was too much emphasis on literature in the English curriculum. It was suggested that the English curriculum might include simulation of employment-related activities, job interview role plays, public

speaking, work experience for students and greater emphasis on material from magazines, newspapers and government reports. Some teachers felt that the introduction of these types of components into the English curriculum could be facilitated by the introduction of a second English course, for example, Business English.

Mathematics

In the lower secondary school, helping students with "basic" numeracy skills was considered by teachers to be an important way mathematics prepared students for the world of work. More specific examples such as taxation, insurance, hire purchase, use of computers and calculators, measurements, estimates and approximations were also mentioned. At Year levels 11 and 12, the content of the Social Mathematics course was considered to be most relevant to the world outside the school. In particular, Social Mathematics developed an awareness of the use of computers, finance, probability and statistics, and social implications of mathematics. The course was considered useful by teachers because of its essentially practical orientation. On the other hand, Mathematics I and Mathematics II were seen as being related to the world of tertiary education.

Teachers considered that one way of making the mathematics curriculum more relevant to the world of work would be to introduce more applied mathematics and to relate it more closely to real-life situations. Students might then be able to see how mathematics is useful in realistic and practical situations. A number of teachers questioned whether the aim of mathematics should be to prepare students for the world of work.

Sciences

At the lower secondary level, science was seen to provide a "broad overview" of scientific principles; it was not necessarily related directly to the world of work. A comment from a lower secondary science teacher typifies this type of response: "the science curriculum probably has no direct relevance to work, but it gives students a basic idea of the laws of the world as well as basic ideas of biological phenomena". Other teachers reported that learning how to read scales, record data, write reports and work in a laboratory were aspects of the science course in Years 8, 9 and 10 which had direct application to employment.

In the upper secondary school, the following aspects were mentioned as ways in which science helped students as future participants in the world of work: preparation for further study, helps students work independently, develops abstract thought processes in students, encourages objective decision-making, helps students understand their own bodies.

To make science more relevant, teachers of lower secondary school students suggested that the practical application of scientific principles should be given greater emphasis in the curriculum. One teacher aptly summed up these feelings when he reported that there should be a -

> more balanced blend of theory and application necessary to establishing relevance for the student. There is too great an emphasis on theory - many students fail to see any relation between what they are taught and the world of work.

One way of obtaining this, some teachers suggested, would be to have more work experience as part of the curriculum in the sciences. For Years 11 and 12, some teachers also echoed these sentiments, although a number said that the aim of secondary science in Years 11 and 12 was to prepare students for tertiary education.

Home Economics

Teachers reported that Home Economics helped prepare students for the working world by: developing human relationships skills, consumer education, use of leisure-time activities, budgetary management, and by providing courses on and experience in sewing and clothing design, cooking and interior decoration.

Those teachers who felt that Home Economics was not adequately helping students to enter the world of work considered that the course could be made more practical

by, for example, studying industrial and business methods of food and textile production, showing how skills are used directly in specific occupations, and providing opportunities for simulated interviews and work experiences. Lack of time allocated to Home Economics was also cited as a reason why the Home Economics course was unable to be of more benefit to students.

Commercial Subjects

Teachers of commercial subjects pointed to typing, shorthand and office procedures (e.g. petty cash book, telephone use, postage book) as being of direct relevance to employment. Several teachers made comments such as "Typing and General Commercial Studies courses are based on what the students will have to know and use in the office situation". In the Shorthand and Typing classes taken by one teacher "as near office conditions as possible were maintained".

There were, nonetheless, a small number of teachers who felt that commercial subjects should be related more to a real life situation, for example, by using the books of a local business firm. Other teachers suggested that data processing and the use of computers could be introduced into the courses. There was also a plea from some teachers for more up-to-date business equipment (e.g. electric typewriters) to be available to their students.

Manual Arts

Manual arts courses developed students' manual skills and co-ordination and provided them with experience of using a wide range of tools and materials. It also taught them about safety in industry. Especially in the upper school, a small number of teachers reported that their students participated in workshop courses closely related to a real work situation in which they filled out time sheets and the like. One respondent reported that students are set tasks similar to those in an apprenticeship.

Of the few teachers who claimed that manual arts subjects did not adequately prepare students for the world of work, the most common complaint at the lower secondary level was that the technical drawing course was out of date. A second point was that some teachers considered that more modern materials and techniques should be used. For example, a teacher of lower secondary school students reported that the curriculum used dovetailing joints with woodwork, when industries used particle board as a medium, thus making the study of dovetail joints of limited use.

Some General Comments

The impression gained in reading through the teachers' comments tends to reinforce the results from the question on overall aims of secondary education. It seems that teachers are concerned with preparing students for the working world. However, they would agree that preparation for the world of work is but one aspect of a school's role. Moreover, teachers do not think that the school should prepare students for specific occupations in society (although some teachers of commercial subjects, and to a lesser extent manual arts and home economics teachers did consider that schools could prepare students for certain occupations). Perhaps the role of the secondary school is best expressed in the comments of a history teacher, who was expressing the views of many of his colleagues when he stated:

> On average, an ordinary citizen spends 35-40 hours a week at work, 56 hours a week sleeping and the remaining 70+ hours a week in general living. I feel very strongly that it is not necessary for every subject to cater for work preparation, and although history has some application in the field of work, I am not prepared to justify it in these terms. . . . it is necessary to retain subjects such as history for cultural enrichment and social awareness.

REPORTED TEACHER ATTITUDES TOWARDS WORK

This chapter seeks to explore the reported attitudes of teachers towards work. To measure attitudes towards work, teachers were asked to rate their extent of agreement on a five point scale (strongly agree, agree, undecided, disagree, strongly disagree) with each of 19 items. The items were designed to investigate attitudes towards: the value teachers placed on different types of occupations, the influence academic achievement and personal choice should have in determining a student's career choice and the place of student part-time and voluntary work.

This information was collected with the expectation that a teacher's reported attitude towards these areas might influence the manner in which he teaches about the world of work. For example, if teachers highly value tertiary education and professional careers, but consider that manual occupations are of little value, it is possible that this will subtly influence the types of occupations to which their students will aspire.

Table 16: Reported teacher attitudes towards work

Item No.	Item	Proportion agreeing with statement %
15.	If time permits, it is a good idea for students to undertake voluntary community service outside school hours	96
10.	Teachers should emphasise that manual work makes a positive contribution to society	95
13.	It is a good idea for students to undertake some form of manual training	92
19.	Students should not be discouraged from entering manual occupations if they wish to do so	92
3.	Students should choose the career in which they are most interested	91
14.	If time permits, it is a good idea for students to undertake paid part-time work outside school hours	86
6.	Academic achievement should be seen only as a general guide to career choice	84
4.	Students should not be discouraged from entering unskilled occupations if they wish to do so	79
12.	Students who cannot cope with the academic school curriculum at upper secondary level should seek employment	79
17.	Manual occupations should be regarded more highly than at present	74
5.	Academically talented students should be discouraged from entering the workforce immediately after Year 10	69
2.	The academic achievement level of a student should be a major factor in determining his choice of career	67
7.	Students with a good academic record should be discouraged from choosing unskilled occupations	63
11.	Students who cannot cope with the academic school curriculum at lower secondary level should seek employment	59
1.	Unskilled occupations should be regarded more highly than at present	59
8.	A high level of academic achievement is a necessary prerequisite for getting a "high status" job	48

Item No.	Item	Proportion agreeing with statement %
6.	Academically talented students should be discouraged from entering the workforce after Year 12	38
16.	It is generally better for students to commence tertiary education after Year 12 than to enter the workforce	26
18.	Students with a good academic record should be discouraged from choosing manual occupations	19

The picture of secondary teacher attitudes painted by the above items portrays teachers as valuing manual and unskilled work in general, but not to the extent that academically talented students should choose unskilled occupations (Item 7). Teachers, however, would not discourage students, academically talented or otherwise, from choosing manual occupations. They consider that academically talented students should continue their education until at least Year 12, when they should not be discouraged from entering the workforce if they wish to. Teachers did not see tertiary education as preferable to work after Year 12. There was less support for the idea that students who cannot cope with the school curriculum at lower secondary level should seek employment than for the notion that they should seek employment if they cannot cope at the upper secondary level. Teachers strongly supported students' undertaking part-time or voluntary work if time was available.

Reported teacher attitudes were further analysed by sex, age, type of school and amount of full-time work experience (none, one year or less, more than one year). Differences were not startling. A number of differences are, however, noted below.

- A larger proportion of teachers without full-time work experience agreed that it was generally better for a student to commence tertiary education after Year 12 than to enter the workforce.
- Those with more than twelve months' full-time work experience less strongly supported the idea that academically talented students should be discouraged from entering the workforce immediately after Year 10 than did teachers with one year or less of work experience or no full-time work experience at all.
- Teachers in government secondary schools agreed less strongly than teachers in non-government schools that -
  - if time permits, it is a good idea for students to undertake voluntary community service outside school hours
  - students should not be discouraged from entering manual occupations if they wished to do so
  - it is generally better for a student to commence tertiary education after Year 12 than to enter the workforce.

The last-mentioned item was least strongly supported by teachers in non-government non-Catholic schools.

The above findings indicate that the reported teacher attitudes towards work varied little with respect to the full-time work experience of the teachers, their sex and age and the type of school in which they were teaching. It appears, then, that time spent in employment other than teaching has little impact on the kinds of attitudes expressed in the items used in this study.

CONCLUSIONS

This study has examined the background characteristics, work experience, extent of contact with the world of work and attitudes towards work of teachers in secondary schools in Queensland and these teachers' views concerning the role and aims of secondary education particularly as they relate to preparation for the world of work. Where appropriate, comparisons were drawn between teachers having different amounts of full-time work experience, in different types of schools, of various ages and of either sex, and teaching in different curriculum areas.

The study did not attempt to show the amount of student involvement with the world of work, to describe, list or evaluate the many school programs of student work experience or to determine how a teacher's experience in other forms of work effects the way in which he is able to prepare his students to enter the working world. Rather, the intention was to provide some information on the individual teacher in the areas outlined above, which, it is hoped, will be useful in further considering the relationship between secondary schooling and work and its possible implications for teacher education.

Summary

On the one hand, it could be argued that there is little evidence to support the contention that teachers lead an "ivory tower" existence, neither having nor wanting any direct contact with the world of work through previous employment, or having contact with other occupations as children. The results show that over half of the teachers had some full-time work experience outside teaching, while two-thirds had some part-time work experience. Furthermore, a large majority of teachers would be prepared to participate in a program of alternative work experience. Teachers had come from a variety of family backgrounds ranging from homes in which the father was an unskilled worker to professional homes.

On the other hand, the results also show that the work experience, other than teaching, that teachers have participated in has been mainly for short periods of time. Only 18 per cent of teachers had been involved in another occupation, full-time, for more than two years.

A substantial majority of secondary teachers had not organised representatives of business and industry or employee associations to talk to students in their classes. A similar large proportion of teachers had not taken their students to places of employment. However, in many schools, the organisation of these visits was the responsibility of the careers or guidance officer. Teachers might not have seen it as part of their role to organise such visits. Moreover, teachers wanted more school-work contact of this type. The major factors preventing this were those over which the teacher could exert little individual influence, viz., lack of time and time-tabling difficulties.

Teachers value manual, if not unskilled work, highly and would not discourage students from choosing manual occupations if they wished to. The results do not provide evidence that teachers are pushing their students towards tertiary education. They indicate that teachers would accept that students might legitimately choose manual occupations as worthwhile alternatives to tertiary study.

While agreeing that secondary schools should prepare students for tertiary education, teachers saw the school's role in the personal development of students and in preparing students for the world of work in general as more important. Teachers did not, however, consider that secondary schools should prepare students for specific occupations. It was also felt by teachers that more emphasis should be placed both on the personal development of students and general preparation for the world of work, but not on preparing students for tertiary education.

Teachers considered that one means of placing more emphasis on helping students to prepare for the world of work would be to relate the curriculum to more practical real-life situations encountered by students. Research by the Schools Commission (1980) indicates that more students would also find greater usefulness in a curriculum which was related directly to their own personal experiences. The Schools Commission report warns, however, that it is not desirable to have a curriculum based purely on the practical needs and interests of the students. A balance between academic and practical aspects should be maintained.

In summary, the impression gained from the results is that teachers see secondary schools as having a role to play in helping students enter the working world. Further, teachers consider that more emphasis should be given to this aim. They were willing to participate in programs of alternative work experience and were keen to have more employer or employee representatives visit their classes, and to visit places of employment with their students. Nonetheless, teachers considered helping students to prepare for the working world to be but one aim of secondary schools, and some teachers felt that students were prepared for the world of work through a general education. Perhaps the views of teachers are best expressed by Jochimsen who claimed at the 1979 conference of the Australian College of Education that "one aim of education is preparation for work . . . but preparation for work can't be allowed to dominate education" (Jochimsen, 1980, p.82).

Issues for Consideration

A number of issues for further consideration have emerged from the research. These suggestions, listed below, are not meant to be an exhaustive list of ways in which secondary schools and the world of work can co-operate more closely, but they include several pertinent points arising from this project.

- Given that teachers consider programs of alternative work experience to be valuable and that they would be willing to participate in them, employers might consider ways of providing opportunities for teachers to undertake other forms of work.

- Any programs of alternative work experience should be carefully evaluated. Although difficult, the evaluation should, inter alia, examine the ways in which a teacher's experience in alternative occupations is translated into classroom practice. In particular, it would be significant to ascertain whether teachers who have had experience in other occupations are able to prepare their students more adequately for the working world.

- Tertiary institutions responsible for the pre-service preparation of teachers could consider ways in which student teachers can be given more opportunities to discuss the aims of secondary education as they relate to preparation for the world of work.

- The discussion about the secondary school's role in preparing students for the world of work might be more meaningful to student teachers if they have themselves had experience in occupations other than teaching. Tertiary institutions could therefore consider the desirability and feasibility of arranging opportunities for their students to participate in other types of work before or during their teacher preparation.

- Tertiary institutions might examine the mechanism whereby future teachers could be made more aware of ways in which they can introduce concepts relating to the world of work into their teaching.

- Schools could examine ways of making the school timetable more flexible to enable individual teachers and their students to have more contact with the working world.

- Ways of providing greater opportunities for teachers and students in country schools to have exposure to a wider range of occupations might be considered by school systems.

While the above list emphasises the work preparation function of secondary education, it is not meant to imply that other roles of secondary education are unimportant. Further, each of the suggestions is concerned with ways in which students might be better prepared for the world of work. This is not intended to convey the impression that future members of the workforce should be moulded to suit the expectations of employers. In addition to schools considering ways in which they can prepare students more adequately for the working world, employers should consider how the world of work can make the best use of the abilities and aspirations of today's and tomorrow's secondary school leavers.

REFERENCES

Australian Association for Research in Education Annual Conference. Youth, Schooling and Unemployment, Sydney: AARE, 1980.

Bassett, G.W. Teachers in Australian Schools 1979. Melbourne: Australian College of Education, 1980.

Board of Teacher Education, Queensland. Annual Report 1980. Toowoomba: Board of Teacher Education, 1981.

Broom, L. and Jones, F.L. Opportunity and Attainment in Australia. Canberra: Australian National University Press, 1976.

Broom, L. Jones, F.L. and Zubrzycki, J. An Occupational Classification of the Australian Workforce. Australian and New Zealand Journal of Sociology, Vol. 1, Supplement, 1965.

Campbell, W.J. and Robinson, N.M. What Australian Society Expects of Its Schools, Teachers and Teaching. Brisbane: University of Queensland, Department of Education, 1979.

Commonwealth Department of Education. Report of the Working Party on the Transition from Secondary Education to Employment. Canberra: Australian Government Publishing Service, 1976.

Commonwealth State Working Party. Transition from School to Work or Further Study. First Report. Canberra: Australian Government Publishing Service, 1978.

Commonwealth State Working Party on the Transition from School to Work or Further Study. Second Report: Career Education and Transition Services. Canberra: Australian Government Publishing Service, 1979.

Committee of Inquiry into Education and Training. Education, Training and Employment, Vol. 3. Canberra: Australian Government Publishing Service, 1979.

Department of Education, Queensland. School/Work Interface. Report to Schools from the Director's Committee on Secondary Education. No. 7, October 1979.

Henderson, J.C. Those Between School and Work in Australian College of Education. Education and the World of Work, 20th Annual Conference, 1979. Carlton: Australian College of Education, 1980.

Hook, T. Work Experience for Teachers. Phoenix, Vol. 3, No. 1, pp 67-94, 1980.

Jochimsen, R. The Changing World of Work in Australian College of Education. Education and the World of Work, 20th Annual Conference, 1979. Carlton: Australian College of Education, 1980.

Nie, N.H., Hull, C.H. Jenkins, J.G., Steinbrenner, K. and Bent, D.H. Statistical Packages for the Social Sciences. New York: McGraw-Hill, 1975 (second edition).

Schools Commission. Schooling for 15 and 16 Year Olds. Canberra: Schools Commission, 1980.

Select Committee on Education in Queensland. Final Report. Queensland Legislative Assembly, 1980.

Sturman, A. From School to Work: A Review of Major Research in Australia. Australian Education Review, No. 13. Hawthorn: Australian Council for Educational Research, 1979.

SECTION 2

LITERATURE REVIEW

Secondary Schools and The World of Work:

Some Recent Australian Literature

EMERGENCE OF INTEREST IN THE TOPIC

Over the past several years, increased attention has been given to the relationship between education and schooling and the world of work. Employers, governments, the media and teachers, and other community groups, have all joined in discussion and debate about the school's role in preparing students for work and adult life. Reasons for the current interest in the school-work relationship have been identified by Berkeley (1981) as:

- the rise in unemployment, particularly of the young;
- changes in the structure of the labour market;
- the more critical view of education that characterised the so-called great debate and its aftermath;
- dissatisfaction with the quality of preparation for work at various educational levels;
- the movement away from theoretical and abstract study to practical and applied knowledge;
- the increased recognition that there existed a need in most countries for a youth policy that had regard for the education and/or training of all persons up to the age of 18 or 19 years;
- a realisation that the world in which present school children will live and work will be significantly different from that in which their parents and teachers grew up.

Karmel (1977) argues that the worlds of work and school have become separated because of two long-term trends. Firstly, the extent to which people have been remaining in full-time education for longer periods of time and secondly, the decline of job opportunities for the young. These two trends have led to greater separation of the world of adulthood and work from the world of youth and schooling and thus to a greater need for careful attention to be paid to preparing youth to enter the adult world.

AIMS OF SCHOOLING

The secondary school's role in preparing students for work and adult life might be better appreciated if it is set in the context of the overall aims of secondary education.

A number of Australian reports and articles have commented on the aims and purposes of secondary education. A brief resume of some of these is given below.

Review of School-Based Assessment in Queensland Secondary Schools (Board of Secondary School Studies, 1978)

Bearing in mind that young people are being educated in, and for, life in a pluralistic society, a system of secondary education should provide a wide range of experiences for all the youth of society, regard being had to the requirements of a sound general education and to the specific needs of students related to their age, cultural heritage, aptitude, ability and special interests. Thus through the curriculum and instructional processes, secondary school should provide opportunity for, and assistance in, the further development of:

- the student's physical well-being and mental health;
- the student's fundamental intellectual skills;
- the student's acquisition of knowledge and the related skills of validating, organising, interrelating and utilising such knowledge critically and constructively, in order that he/she might be culturally and scientifically informed and aware;
- the student's highest level of mastery of communication skills;
- the student's awareness of his/her abilities and his/her effective use of them for the betterment of himself/herself and society;
- the student's consciousness of his/her own values and value commitments and his/her understanding of the values of others and of the values and moral traditions of Australian society;

- the student's ability to relate effectively to others and to find self-realisation and self-expression through such relationships;
- the student's readiness to assume a mature adult role in society.

Core Curriculum for Australian Schools (Curriculum Development Centre, 1980)

All individuals have the right to education freely, equally and with concern shown for their individuality and personality. School curricula, therefore, need to provide for and encourage the full and rounded development of all students for the whole period of schooling, for which there are, for all Australians, minimum legal entitlements and requirements.

Australia is a parliamentary democracy subscribing to basic human rights, the rule of law, full and active participation in civic and social life, and fundamental democratic values. Schools have an obligation to teach democratic values and promote an active democratic way of life, including participation in the parliamentary system.

Australian society sustains and promotes a way of life which values, inter alia:

- a sense of personal, group and national identity and unity in all its people;
- free communication amongst and between individuals and groups;
- responsible participation in community and civic affairs;
- tolerance and concern for the rights and beliefs of others;
- equality of access to and enjoyment of education, health, welfare and other community services;
- self-reliance, initiative and enterprise;
- personal and social achievement;
- rights to the ownership and use of property including property in the form of personal labour;
- productive and socially responsible work;
- conservation and development of a shared and dynamic heritage;
- a sense of individual and group identity;
- membership of the international community.

The schools, therefore, should encourage students to understand, reflect upon and subscribe to these and other basic values of the culture.

Participation in our society requires the exercise of a responsible economic role. Just as society needs productive work from its citizens, all people are entitled to work and to economic satisfaction. The schools need to educate all students for effective and satisfying participation in the economy. Paid work is the most visible and obvious, but not the only means of ensuring this participation.

All individuals, to be educated, need to strive for mastery of basic learning tools and resources. These include:

- communicating in spoken and written language;
- number skills, mathematical reasoning and spatial relationships;
- scientific processes and their applications;
- logical inquiry and analysis;
- creative, imaginative and intuitive ways of thinking and experiencing;
- the capacity to apply and use knowledge symbols, processes and skills;
- perception, expression and appreciation through the arts and crafts;
- manual and other physical skills;
- management of bodily and mental health;
- the personal articulation of experience and thinking into value and belief systems.

Schools therefore, should sponsor and foster these basic learning tools and resources, not in isolation but in close working relationship with other social institutions and groups.

Arising from these aims, the Curriculum Development Centre identified key learnings for schools and the processes by which they might be developed. These are discussed later in this paper.

Karmel: Vocational Education Warning (1981)

Karmel has suggested that three broad aims of formal education can be described as follows:

- the intellectual development of the individual directed towards his or her self-realisation;
- the social development of the individual as a member of society. This includes political aspects (living in a democratic society) and economic manifestations (working in an advanced industrial economy);
- the education of an individual for his or her vocation i.e. one's ordinary occupation, business or profession.

Karmel asserts that knowledge about the world of work - the sociology of work, the effects of technological change on work, why different kinds of work command different rewards - is not vocational education, but is related to the socialisation function of education (the second of the above aims).

Select Committee on Education in Queensland (Queensland Legislative Assembly, 1980)

The Ahern Committee wished to point out in the strongest possible terms that the principal aim and purpose of our school system is the education of children to take their place in the adult world. More specifically, the Committee suggested that the aims of schooling should be:

- to help children develop lively, enquiring minds, giving them the ability to question and to argue rationally, and to apply themselves to tasks;
- to help children to the maximum development of their physical qualities, giving them an understanding of the means of achieving and the benefits of physical fitness, health and hygiene;
- to help children to use language effectively and imaginatively in reading, writing and speaking;
- to provide a basis of mathematical, scientific and technical knowledge, enabling boys and girls to learn the essential skills needed in a fast-changing world of work;
- to instil respect for moral values, for other people and for oneself, and tolerance of other races, religions, and ways of life;
- to help children understand how our country is governed and to instil an awareness of the social, civic and political responsibilities and rights of adult citizenship;
- to teach children about human achievement and aspirations, and in particular to make them aware of the traditions and culture of Queensland and of Australia and of the heritage of our past;
- to help children understand the world in which we live, and the interdependence of nations;
- to help children to appreciate how the nation earns and maintains its standard of living and properly to esteem the essential role of agriculture, industry and commerce in this process;
- to encourage and foster the development of the children whose social, physical or environmental disadvantages cripple their capacity to learn, if necessary by making additional resources available to them;
- to help children develop an understanding of and sensitivity to the arts, and to become aware of the value of the arts in their own lives and in the lives of others.

Campbell & Robinson: What Australian Society Expects of its School, Teachers and Teaching (1979)

As part of this study, a national sample drawn from five societal groups - teachers, students, parents, business people, unionists - was asked what it thought the primary functions of school should be. The items were derived initially from letters to newspapers, feature articles on education and media reports. Those aims rated as most important were, in order:

- to prepare children to cope with and contribute to life in society;
- to prepare children to work co-operatively with others in building their cultures and societies;
- to develop in each child a sense of personal worth and esteem;
- to prepare children to continue learning when school days are over;
- to help children cope with their present life experiences.

Students tended to be less enthusiastic than the other societal groups about the school's having a primary role in developing in each child a sense of personal worth and esteem and in preparing children to continue learning when school days are over.

After these five items, the one ranked next in importance was that 'a primary function of schools should be to prepare children to enter the workforce'. While there was a lack of consensus among teachers concerning this item, more than 90 per cent of business people in five of the six states agreed that preparing children to enter the workforce should be a primary function of schools. The opinions of parents, students and unionists fell between those of teachers and business people.

Collins and Hughes Survey on Expectations of Secondary Schools (1979)

Collins and Hughes (1979) surveyed students, teachers and parents in New South Wales to ascertain their opinions of the goals of secondary schools. They found high levels of agreement both within and among the three groups on the goals of secondary schooling. The 'basics' were ranked highest by each group, while 'academic' subject items were consistently ranked near the bottom. In particular, academic items with a 'cultural flavour' were ranked the very lowest. Items of this type included references to English literature, fine arts, history and foreign languages. Where differences did occur, they were mainly as a result of students ranking 'practical' items higher in the list than did the other groups. Examples of practical items included 'having some brief experiences in a few jobs', 'having skills required by modern life (e.g. how to fill out a tax form, how to drive a car)', 'having specific skills you need for a chosen field of work'. On the other hand, teachers tended to rate items concerned with 'social awareness' (e.g. can listen sensitively and with understanding to others, accept those who think and act differently) and 'personal autonomy' (e.g. can organise their own time and work independently, are able to think about issues, weigh information and make reasoned judgments) higher than 'practical' items. The opinions of parents were between these two poles.

SOME DISSATISFACTION WITH SCHOOLS

While dissatisfaction with the performance of the schools has been expressed by various groups, perhaps two groups who have expressed most disenchantment have been employers and pupils.

Employers

In a submission to the Working Party on the Transition from Secondary Education to Employment (Commonwealth Department of Education, 1976, p.42), the Central Industrial Secretariat claimed that there were four major problem areas associated with the entry of school leavers into the workforce. These were:

- their lack of understanding of the nature and operation of industry and commerce;
- their lack of understanding and appreciation of what is expected of them and their basic responsibilities upon taking up employment;
- generally a total lack of any labour force skills;

- employment expectations beyond their immediate capabilities and often beyond the capacity of industry and commerce to fulfil.

The Committee on Education, Training and Employment (the Williams Committee) in summing up the submissions from employers found that the employers' main complaint against schools was that they were not equipping students with the basics of written and verbal expression and arithmetical skills. Employers complained that lack of these skills did not enable students to make a satisfactory transition from school to work or further study.

A survey of 284 employers by the Education Department of Western Australia (1978) found that 60 per cent of employers looked for a positive willing attitude towards work when hiring school leavers. Other qualities which a substantial proportion of employers considered important were appearance (35 per cent), satisfactory education (32 per cent) and manner (30 per cent). When asked in which areas they felt school leavers needed improvement, literacy skills rated highly, although they were rated second to attitudes. Those qualities of school leavers seen by employers as needing most improvement were: attitude (43 per cent), general verbal skills (38 per cent), personal presentation or appearance (28 per cent), general vocational preparation (24 per cent) and general number skills (22 per cent). Employers, however, did not consider that the development of appropriate attitudes towards employment was the sole responsibility of the school. They felt that the home had an equal responsibility with the school in developing a positive attitude in school leavers.

A pilot study of 30 employers in North Queensland (Sungaila, 1981) showed similar results with respect to the qualities employers expected of school leavers. A clear majority of employers reported that the following attributes were essential to all new recruits:

- willingness to work;
- ability/willingness to follow instructions;
- punctuality;
- ability to respond to and mix with other employees;
- good attitude towards job conditions;
- ability in basic 3 Rs;
- presentable appearance;
- appreciation of importance of their tasks;
- ability to communicate well verbally;
- sense of responsibility.

In 1981, the submission of the National Industrial Council Confederation of Australian Industry to the Senate Standing Committee on Education and the Arts reiterated the concerns of the submission to the 1976 Working Party referred to above. This organisation representing employers claimed that

> . . . a significant proportion of young people entering the labour force directly from secondary school:
>
> - lack understanding of the nature and operation of industry;
> - have little idea of what they are looking for in the way of employment;
> - have little idea of what may be available to them in the way of employment;
> - lack an understanding and appreciation of what will be expected of them and their basic responsibilities upon taking up employment;
> - possess employment expectations beyond their immediate capabilities and often beyond the capacity of industry to fulfil; and
> - possess a low level of basic skills in literacy and numeracy (p.4).

The importance of the basics to employers and the dissatisfaction which is often felt by employers about the school's performance in giving pupils adequate basic skills is highlighted by an article which appeared in The Australian newspaper (6 January 1982) and which is reproduced below.

Employers blame schools*

Apprenticeships go begging because of poor grasp of maths - by Bill West

Hundreds of apprenticeships have not been filled because applicants do not have basic mathematical skills.

Australia's major employer of apprentices, Australian Iron and Steel Pty Ltd, and the NSW Chamber of Manufacturers have been joined by other industrial groups in criticising the academic standards of school-leavers.

Employers say young people applying for apprenticeships do not have a grasp of basic mathematics.

The Chamber of Manufacturers in NSW recently set an exam for 700 applicants to fill 40 positions offered by its member companies.

The result was an average pass mark of only 51 per cent. Many Year 10 school leavers failed the relatively simple examination outright.

The personnel manager of Australian Iron and Steel, Mr John Thirlwell, said 60 of 142 vacancies for first year fitting and turning apprentices had not been filled because applicants did not have satisfactory academic standards, particularly in maths.

A 'significant proportion' of the 274 school-leavers who applied for the vacancies scored a mark of only 40 per cent in an examination that accompanied their applications.

Such a mark meant they were unlikely to be able to cope with technical college and would drop out within a year.

A spokesman for the Sydney Chamber of Commerce, Mr David Cliff, said the generally low standard of basic skills had led to many employers devising tests to screen applicants.

An officer of the NSW Government Apprenticeship Directorate said many technical colleges had tried to solve the problem by providing remedial maths courses.

'We're finding many school-leavers don't even know where to put the decimal point,' the spokesman said.

'It has become a sore point with many masters of apprentices in industry that the basic mathematical tables are just not known as they once were.'

Some companies believe the problem lies with the poor image of some apprenticeships. Executives say the better students are not interested in trades and would rather take up less skilled jobs offering initially higher pay.

But according to the secretary of the South Coast Division of the NSW Chamber of Manufacturers, Mr Jeff Latham, the problem should be taken up by education authorities.

'These kids are not getting the basic knowledge required to get a job and that can only be rectified in the school room,' he said.

'We are very concerned that if they only manage to scrape through the test we set them they will end up failing at technical college.

'If that happens the company involved simply loses its investment.

'We have had informal talks with the NSW Education Department about the problem, but they just counter our figures with their own, apparently opposing, statistics and nothing is done to improve the situation.

'We have reached a stalemate and meanwhile industry suffers.'

A survey of school leavers by the Australian Council for Educational Research (Williams, Clancy, Batten and Girling-Butcher, 1980) provided evidence which does not support the claims of some employers that schools are not preparing students adequately. The survey showed that, other things (including literacy and numeracy

* Reproduced with permission.

skills) being equal, early school leavers with more schooling found jobs more quickly. Thus, the authors of the report argue that:

> The evidence of our data seems at odds with the argument that employers see the schools failing to provide an adequate training in basic skills. If this were so the amount of extra schooling ought to matter little to employers - the extra years of inadequate preparation counting for little - yet the evidence suggests that it matters a great deal both for unemployment during the early career and for the status of the occupation attained. Whatever it is that schools provide over and above the basic skills of Literacy and Numeracy, apparently it increases productivity because those who have more of it have a reduced risk of unemployment (Williams et al, 1980, p.122).

Pupils

Another significant group which has expressed some dissatisfaction with secondary schools are the pupils in those schools. The greatest concern of many pupils appears to be the perceived irrelevance of school to their needs, schooling often being seen as unrelated to their future plans or their present everyday experiences.

The major study of Sydney teenagers undertaken by Connell, Stroobant, Sinclair, Connell and Rogers (1975) in 1969-70 also pointed to the perceived irrelevance of school to its students. Of thirteen listed concerns, students rated 'choosing a future job', and 'how well I do at school' as most important (p.221). However, from the responses, the authors gained the impression that 'the school's offerings, while not rejected, are felt to be irrelevant to or distant from the students' real concerns' (p.225). This point is highlighted by the results of one questionnaire item in particular which showed that a low proportion of students reported that 'things they were studying in school are the things they really want to know' (p.225).

The annotated bibliography on the transition from school (Anderson and Blakers, 1980) refers to several studies which report pupils' dissatisfaction with school. For example, interviews with 200 early school leavers conducted by the Department of Employment and Youth Affairs showed that for these students 'the education system did not provide adequate preparation for work and generally had little influence on choice of occupation'. Moreover, the further education system was seen as largely irrelevant in improving employment skills (Anderson and Blakers, 1980, p.105).

A survey of school leavers conducted by the South Australian Education Department (Anderson and Blakers, 1980, p.106) found that school leavers saw school as irrelevant, although they reported that career counselling was useful. Drawing on information from interviews with high school students in Melbourne and Tasmania, Fawns and Teese (Anderson and Blakers, 1980, p.80) reported that students felt that schools should be reorganised to provide for more immediately useful knowledge, rather than concentrating on an academic program with distant aims. A similar survey conducted by Anderson, Saltet and Vervoorn, (Anderson and Blakers, 1980, p.78) reported that there were 'strong expressions of interest from Canberra students for a curriculum which is more work oriented and for opportunities to mix work and school'.

In summarising its findings about the educational experiences of 15 and 16 year old students in Australian schools, the Schools Commission claimed that 'the schools are seen to be too unrelated to the practical demands of working life and living in society, both because other means of preparing young people have broken down and because there is too much emphasis on preparing young people for professional status' (Schools Commission, 1980, p.69). Comments by a student typical of many the Commissioners met throughout Australia illustrate the kinds of feeling many youth have about school: 'Staying at school is a waste of time. You don't learn anything worthwhile. The teachers don't even mark our exercise books. There ought to be more sheet metalwork and mechanics. In any case, it's not what you know but who you know' (p.1).

Other reviews of the Australian literature also point to the perceived irrelevance of school to many of its students. Sturman (1979), although warning that 'it is not easy to generalise about attitudes towards school because these will vary with different students depending on their circumstances' (p.55), concludes that the weight of evidence suggests that substantial proportions of students and ex-students express very negative attitudes towards school. Examples of these negative attitudes cited by Sturman include 'boring', 'fed-up', 'enjoying nothing connected with school' and 'finding education a complete waste of time'. With respect to the school's role in preparing

students for work, Sturman claims that 'school students do not feel that they have been given adequate preparation for the world of work' (p.76). Moreover, 'numerous studies have indicated that students were dissatisfied with the career education, and especially the guidance, they had received and had not felt prepared for the world of work' (p.76). Sturman concludes that 'the evidence clearly points to a feeling by students and school leavers that there should be a closer relationship between work and school' (pp 76-77). Similarly, in her review, Blakers (1978) reported that students 'feel themselves inadequately guided, informed and prepared for making choices and for facing adjustments which follow transition to the adult working world' (pp 30-31).

On the other hand, King (1981) asserts that reviews and studies have tended to stress the negative attitudes towards school reported by youth and have often tended to under-emphasise the positive attitudes towards school held by many students. Nevertheless, it seems fair to conclude that while the research does not show that negative attitudes towards school are held by a majority of students, it does show fairly clearly that there is a sizeable proportion of students who are dissatisfied with their schooling. Moreover, this dissatisfaction appears to be greatest among early school leavers. Even King admits that the research indicates that youth 'are critical of the school for lacking personal and work-related relevance' and 'are also critical of vocation guidance and counselling services provided by the school' (p.43).

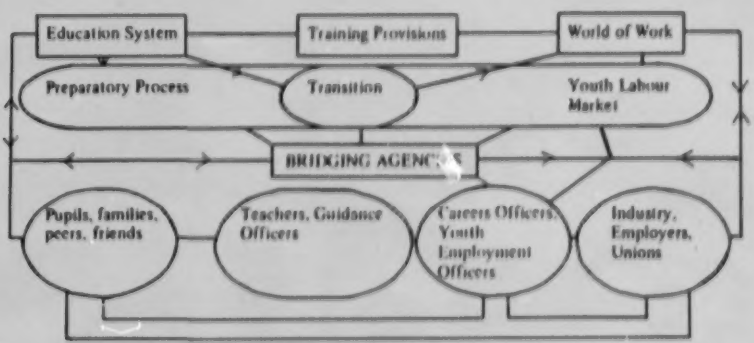
PREPARING STUDENTS FOR WORK AND ADULT LIFE: SOME SUGGESTIONS

Transition as a Process

To think of the transition from school to work as the only adjustment which students make at the completion of their secondary schooling would be to exclude many other adjustments which young people need to make. Berkeley (1981) points out that there are many ways of expressing the transition including transition from:

- school to work;
- school to working life;
- school to post-school activities;
- education to employment;
- education to unemployment;
- education to training;
- school to further or higher education;
- learning to earning;
- adolescence to adulthood;
- youth to adulthood;
- dependence to independence (p.16).

Berkeley postulates a model of transition as a process in which many agencies and institutions need to be involved. His model of the transition process is shown diagrammatically below (Berkeley, 1981, p.18):



While this paper and indeed the conference concentrates on the school's role in preparing students for the working world, Berkeley's model serves to remind us that many agencies are involved in supporting youth in a transition process to many different roles and that this idea should never be submerged.

A number of initiatives have been taken to better prepare students for the transition from school to work and adult life. These have included link courses, in which secondary school students take some of their courses in a TAFE institution, vocational education, work experience programs, career education and careers or vocational counselling. Some of these are commented on briefly below. In addition to considering these specific programs, some proposals for the changes to education and secondary schools arising out of a number of selected recent reports are also considered. The first is the Curriculum Development Centre's Core Curriculum for Australian Schools (1980).

Core Curriculum

Based on the aims of education and schooling, the Curriculum Development Centre proposes a core curriculum for Australian schools which comprises fundamental learnings for all students. The core curriculum does not consist of a number of compulsory subjects, but is concerned with a teaching-learning process which relates to defined characteristics and major needs of contemporary society and all youth (CDC, p.13). The CDC has identified nine broad areas of learning that might comprise the core. They are:

- communication;
- moral reasoning and action, value and belief systems;
- work, leisure and lifestyle;
- arts and crafts;
- environmental studies;
- mathematical skills and reasoning and their application;
- social, cultural and civic studies;
- health education;
- scientific and technological ways of knowing and their social applications.

The CDC points out, however, that the core curriculum must give as much emphasis to student learning experiences and situations and the process whereby such material can be learnt as to content. These learning processes include:

- learning and thinking techniques;
- ways of organising knowledge;
- dispositions and values;
- skills and abilities;
- forms of expression;
- practical performances;
- interpersonal and group relationships.

Education for a Changing Society

The Keeves Committee of Enquiry in South Australia (1982) considered that the Curriculum Development Centre's Core Curriculum document was so general that it allowed for virtually anything to be included in the core. They claimed, moreover, that the CDC paper provided little guidance to teachers on matters such as the stage of the curriculum at which various parts of the core should be introduced or the amount of time to be devoted to each element of the core.

The South Australian Committee of Enquiry was more specific in its recommendations. It suggested that four areas of foundation learning should occupy about two-thirds of the secondary school curriculum. The four areas of foundation learning advocated by the Committee are language, science, mathematics and social learning. The remainder of the curriculum would be made up of four further areas, viz., moral reasoning and action; work, leisure and lifestyle; arts and crafts; and health and physical education.

The Keeves Committee also devoted considerable discussion to the impact of technological change on education. They argued firstly, that new employment opportunities created by technological advances will require the provision of training in new skill areas. Secondly, a flexible and adaptable workforce able to respond to changing situations will need to be educated. Finally, provision will need to be made for retraining and recurrent education and the provision of leisure education programs. The Committee considered that as well as providing for the learning of specific skills such as calculator use or computer programming skills, it was important that schools promote an awareness of the impact that technological change would have on society.

As far as specific subjects are concerned, the Committee felt that short courses could be introduced to help students keep abreast of technological developments. The courses which it suggested could be introduced at the upper secondary level were: technological studies, engineering science, modern industry, computing and computer science. The Committee further suggested that existing subjects could have two optional units available to students taking them, such as computers in the curriculum and statistics in the curriculum.

Vocational Education

At the school level, one option which appears to attract little support is that schools train their students for specific vocations. The rapidly changing nature of work brought about to a certain extent by technological advances is seen to limit the usefulness of training for specific occupations. Williams (1980, p.66), for instance, argues that it is 'not possible to think of the world of work as a given constant to which education must adjust . . . it is itself a dynamic kaleidoscope constantly in a state of change'. Dunphy (1980, p.63) claims that the 'rapidity of technological change is transforming the world of work several times within a generation'. Karmel (1980) suggests that unemployment is worse for those with highly specific training. Presenting a case against vocational training in schools, Musgrave (1977, p.F6) argues that 'general education allows ease in retraining or reentry to the education system ... too early specialisation at the best makes such options difficult and at the worst creates highly trained incompetents'.

The Board of Teacher Education's survey of teacher attitudes towards the aims of secondary schooling revealed that teachers endorsed less strongly those aims which were more directly related to preparing students for specific types of employment. There is evidence to suggest, however, that students seem to expect schools to provide them with vocational training. In Collins and Hughes' (1979) survey of students, parents and teachers in New South Wales, students ranked the secondary school's task of making sure the students 'have specific skills [they] need for a chosen field of work' fifth out of a total of 47 items. Parents, on the other hand, ranked this item nineteenth, while teachers ranked it forty-third.

Career Education

Career education has wider aims than vocational education; the latter is mainly concerned with training for particular occupations, while the former is more broadly based and concerned with helping the individual make an occupational choice. Hart (1979) has argued that work experience as an isolated experience can provide only limited benefits, it has greater value as part of a wider career education program. The goals of career education according to Hart should be to help students:

- gain knowledge of educational/vocational possibilities;
- develop skills for preferred careers and lifestyles;
- develop decision-making and life-planning skills;
- develop respect for work.

Thus, it can be seen that career education is much more than the provision of information to help students choose an occupation. Career education is based on the notion that occupational choice is developmental in nature and career education should provide different types of support during different stages of development (Blakers, 1978).

Because of its implicit importance, Hart (1979) argues that career education should not be packaged in a formal course, but should be integrated into all courses. That is, all subjects should be related to the preparation for work and life. However, in Australia

there seems to be little evidence of an integrated approach; career education, where it is available, is usually offered as a separate course (Berkeley, 1981; Blakers, 1978).

Career education is not without its critics. Some writers argue that the major problems in school-work transition arise because of the occupational and economic structure of society. Career education tries to mould students to fit that structure. These critics see career education as reducing expectations and limiting the aspirations of students (Blakers, 1978).

Work Experience

Work experience allows students to spend short periods working full-time at places of work. In a national study of work experience carried out by Cole (1979) in 1977, it was found that over half of the responding post-primary schools provided opportunities for work experience. Some 64,000 students throughout Australia were involved in work experience in 1977.

Following the proclamation of the Student Education (Work Experience) Act, work experience has been introduced into a large number of secondary schools in Queensland. The stated goals of work experience in Queensland are:

- to enable students to recognise that the components of content, process, skills and attitudes within the school curriculum have a direct relevance to the world of work;
- to give students an appreciation of the importance of work to personal fulfilment and to growing independence and maturity;
- to allow students to relate in a positive manner to adults in the work environment;
- to allow students to analyse career opportunities and examine how they relate to personal potential and expectations;
- to give students an insight into the nature and purpose of work, and an understanding of the work environment;
- to understand the contribution of work to the welfare of society (Qld Department of Education, 1980).

Work experience, however, has been criticised in some quarters as being too concerned with individual placement of students rather than with such aspects as 'why different kinds of work command different rewards and are performed under different conditions, the role of trade unions, etc' (Schools Commission, 1981, p.23). A survey of work experience programs carried out by the Queensland Department of Education (Hobbs, 1981) lends some support to this criticism. The survey found that in only 38 programs out of 166 surveyed was the 'general study of work in a social context (e.g. work roles, industrial aspects)' a major aspect of the program. However, 'training in job acquisition skills (e.g. interviews, applications)' was seen as a major aspect of 122 of the programs.

The Adaptive School

While the provision of programs such as those described above may have a role to play in preparing students for the working world, the Schools Commission (1980) believes that schools will be able to respond best to the needs of all their students if they adopt a mode of operation which the Schools Commission refers to as adaptive. Adaptive schools would have the following characteristics:

- warm and friendly relations between students and staff, based on mutual respect;
- a range of course options which gives the emphasis to both practical and theoretical knowledge and to practical and academic skills;
- comprehensiveness, not merely in the range of students for whom they cater but also in the range of educational services they offer;
- an awareness that the prime purpose of their existence is to serve all students while they are within the compulsory schooling period;
- programs consistent with the notion that all post-school options for students require them to be able to function autonomously and effectively;

- close connections with the community being served and through it with the wider society (p.51).

Youth Policy

At a national level, several leading educationists have urged that a comprehensive youth policy be implemented. This would mean government support for a range of options for youth (15-19 year olds) apart from full-time employment and full-time education. Karmel (1979) lists the options as including:

- traditional senior high school leading to tertiary education, mainly at universities and CAEs;
- modified secondary school programs to hold the interest of young people with a previous school record of low achievement and low motivation. This may involve not only the development of new courses within secondary schools but also the development of specialist institutions;
- pre-skill training of a broad kind, including general education, either at secondary schools or at TAFE institutions, leading to skill training, including traditional apprenticeship (e.g. pre-apprenticeship and pre-vocational courses as at present conducted in a number of States at TAFE institutions). Provision should be made for the possibility of transfer to institutions of higher education at a later stage;
- skill training outside the traditional apprenticeable trades. TAFE institutions could be expected to be heavily involved in this option, which is of particular importance in opening up employment opportunities for young women;
- integrated school-work programs on a half-and-half basis. This might involve work activities run by schools (e.g. school firms, school factories, school craft shops or other entrepreneurial or community activities), part-time employment in the public or private sectors, or organised community service;
- combinations of part-time study and part-time work undertaken independently;
- employment subsidies in the form of payments to employers to undertake the training of young people (e.g. the Special Youth Employment Training Program (SYETP) of the Commonwealth Government). Such training should be under external supervision organised by an appropriate authority; or
- employment under normal industrial conditions.

Karmel (1979) argues that the youth policy would be based on the need to ensure that all students had cognitive skills and life role competencies developed to acceptable standards. Counselling and guidance services would be provided on a pastoral care basis, with counsellors having care for individual students over a number of years. The youth policy would need to be supported by a rationalised education and training allowances scheme which would encourage part-time work and study. It would require educational institutions to respond to the demands of youth for education and training courses; and employers would need to maintain places for on-the-job training of young people.

More Fundamental Changes

One critic who has argued for more sweeping and fundamental changes in secondary education is Crittenden. Crittenden (1981) has claimed that there are a number of serious weaknesses in the system of secondary education and these can only be overcome by a major restructuring of the present system. His criticisms of secondary education are:

- The extension of compulsory secondary schooling to age 15 or 16 has obstructed the transition of adolescents into adult responsibilities. Students have little contact with adults at work. Moreover, because school work is planned in detail, adolescents at school have little opportunity to exercise their own initiative or to work co-operatively with others.
- A large number of secondary school students want to get out into the world; they see secondary school as irrelevant to their needs. Tinkering with the curriculum in an attempt to make it more relevant to students' needs, Crittenden claims, will have little appeal to those students who see secondary school as a prison.

- In recent times, the secondary school has tried to adopt the broader function of preparing students for the major roles of adult life rather than just fulfilling a function of contributing to intellectual development. Crittenden argues that the secondary school cannot succeed in these omnibus functions, firstly, because it is artificial for students to learn the skills required for effective participation in practical activities in an institution remote from the real world; and secondly, because teachers lack the necessary skills to perform these broad functions effectively.

- The bureaucratisation of secondary schools makes it difficult for those most closely involved in the educative process, viz., teachers and students to have much of a say. Those making important decisions are often far-removed from the classroom.

- An over-emphasis on credentials and the need to do well in exams leads to undesirable practices such as cramming and the stifling of creativity and imagination.

As a solution to these perceived problems, Crittenden proposes an education system in which the secondary school is only one optional component in an adolescent's education. From the age of 13, attendance at secondary school would be voluntary. Secondary schools would be largely concerned with the development of intellectual skills and the introduction of systematic knowledge. Within a region, different secondary schools would offer various programs; for example, some might offer a broad range of studies while others concentrated on mathematics or languages. Schools within a region would be run according to a 'collegial participatory' model in which a regional team would be primarily responsible for the administration of schools within a region.

In addition to, or instead of, participating in the secondary school, students would be able to choose to attend a 'youth centre' in which a general preparation for adult life would be undertaken. The activities of the youth centres would include general preparation for trades, work experience programs, development of practical skills such as cooking, gardening, house and car repairs, physical fitness, community service projects, study of Australian society and development of literacy and numeracy skills. Students would be free to combine a part-time job with part-time attendance at the youth centre. Staff of the centre would include teachers, social workers, psychologists, careers advisers, medical staff and experts in games and recreation.

Following four years at the youth centre, students could undertake a two-year academic program preparing them for tertiary study, or undertake an apprenticeship.

The youth centres and secondary schools would be supplemented by other agencies of general education to which people would have access throughout their adult life.

IMPLICATIONS FOR TEACHER EDUCATION

One suggestion which has appeared in a number of reports in recent years is that teachers should spend some time in non-teaching occupations as part of their normal career pattern. For example, the Williams Committee (vol.3, p.8) recommended that 'to learn or update their knowledge of the world of work outside the teaching profession there should be a continuing series of seminars on the world of work and opportunities for short-period release or secondment of teachers to other fields of work'. The Select Committee on Education in Queensland (Final Report, p.12) considered that 'necessary liaison should be established within the private sector and other Public Service Departments to allow teachers to spend some time working in one of those areas as a normal part of their service'. In a submission to a South Australian Working Party, employers claimed that:

> teachers should spend some of their time in commerce and industry so that they would be better prepared to advise their students, and would then try to introduce into the curriculum more subjects relating directly to working life (Commonwealth Department of Education, 1976, p.64).

Participation in non-teaching work experience also appears to have the support of teachers themselves. In the Board of Teacher Education's survey (Teacher Education Review Committee, 1981), a large majority of teachers indicated that they would be prepared to participate in alternative programs of work experience for teachers.

There is evidence, however, to suggest that the non-teaching work experience of teachers is greater than is often assumed. The Board of Teacher Education's survey showed that about half of Queensland's secondary teachers had some full-time work experience other than teaching and about two-thirds had some part-time work experience. Admittedly, most of this experience was for short periods of time and in jobs such as clerical work, shop assistance, waiting or labouring.

Blakers (1978) points out that there are difficulties in providing work experiences for teachers. If the period is short,

> it gives an unreal and superficial view of work conditions and relationships. If the period is longer - perhaps one to three years - it is still recognised on both sides as an interim arrangement without the loyalty and commitment normally hoped for from employers (p.45).

The issue of how to find places for teachers in a period of high unemployment is another question which would need to be resolved before such a scheme could be successfully implemented.

One proposal for pre-service teacher education suggested by Hook (1980) is that student teachers should spend two semesters of an eight-semester pre-service course in full-time non-teaching work experience. As an alternative to this, Hook suggests that student teachers could be selected after they had spent a few years after school engaged in non-teaching occupations.

Given that a major complaint about schools is that they are not preparing students with the basic skills, it is not surprising to find proposals which recommend greater emphasis on the teaching of these skills in teacher education programs. For instance, the Report on Education, Training and Employment recommended that 'departments of education in colleges of advanced education and universities give greater emphasis to ways of teaching reading and number work' (vol.3, p.6). The Senate Standing Committee on Education and the Arts recommended that:

> students who are not making satisfactory progress in absorbing the methods and techniques of teaching mathematics and English be required to take special courses aimed to bring them up to the required standard. Students should not be allowed to complete their training unless they have reached satisfactory standards in these basic courses (pp.18-19).

On a similar theme, it has been suggested that tertiary institutions require completion of Year 12 mathematics and English courses as a criterion for entry to teacher education programs (e.g. Senate Standing Committee on Education and the Arts, 1981; Select Committee on Education in Queensland, 1980). On the other hand, the National Inquiry into Teacher Education claimed that it was the responsibility of the tertiary institution to bring student teachers up to an acceptable standard in these subjects and that minimum entry standards in literacy and numeracy should not be specified.

The Board of Secondary School Studies has made a number of recommendations concerning pre-service and in-service education of teachers. It recommends, among others, that secondary teachers study, in pre-service programs, theory and practice of curriculum development and evaluation; theory and practice of the design and evaluation; and theory and practice of assessment and evaluation of instructional materials. Of particular interest at the in-service stage is the recommendation by the Board of Secondary School Studies that the Board and teacher employing authorities confer to discuss

> the provision and training of task forces, consultants and advisory teachers to assist schools on request in relation to (a) curriculum and syllabus design and evaluation - particularly with regard to school subjects, (b) student assessments, (c) school self-evaluation programs, and (d) the development and implementation of pilot programs relevant to innovation in secondary education, e.g. community involvement, work experiences and integrated curricula (Board of Secondary School Studies, 1978, p.57).

With regard specifically to career education, Blakers (1978) asserts that if career education is to be accepted as a recognised part of the curriculum, then career education will need to be discussed in both pre-service and in-service programs so that teachers are made aware of its aims, objectives and role.

It is clear that the current debate on secondary schooling presents new challenges for teacher educators as well as for school administrators and teachers. Whatever the outcome may be, institutions preparing teachers for careers in secondary schools will need to find ways of helping their graduates meet the needs of young people who will be taking their place in the adult world of *the twenty-first century.*

REFERENCES

Anderson, D.S. and Blakers, C. Transition from School: an annotated bibliography of recent Australian studies. Canberra: ANU Press, 1980.

The Australian. Employers Blame Schools. 6 January 1982, p.3.

Berkeley, G.F. Aspects of Transition Education. Brisbane: Department of Education, Queensland, 1981.

Blakers, C. Issues in Career Education. Fitzroy: Australian Frontier Inc., 1978.

Board of Secondary School Studies. A Review of School-Based Assessment in Queensland Secondary Schools. Brisbane: BSSS, 1978.

Campbell, W.J. and Robinson, N.M. What Australian Society Expects of Its Schools, Teachers and Teaching. Brisbane: University of Queensland, Department of Education, 1978.

Cole, P. Work Experience: An Australian Perspective. Melbourne: Planning Services Division, Education Department of Victoria, 1979.

Collins, C.W. and Hughes, P.W. Expectations of Secondary Schools: A Study of the Views of Students, Teachers and Parents. In Committee of Inquiry into Education and Training. Education, Training and Employment, Vol. 2, Canberra: AGPS, 1979.

Committee of Enquiry into Education in South Australia. Education and Change in South Australia. Adelaide: 1982.

Committee of Inquiry into Education and Training. Education, Training and Employment (3 vols). Canberra: AGPS, 1979.

Commonwealth Department of Education. Report of the Working Party on the Transition from Secondary Education to Employment. Canberra: AGPS, 1976.

Connell, W.F., Stroobant, R.D., Sinclair, K.E., Connell, R.W. and Rogers, K.W. 12 to 20: Studies of City Youth. Sydney: Hicks Smiths and Sons, 1975.

Crittenden, B. The Identity Crisis in Secondary Education. Australian Journal of Education, Vol. 25, No. 2, 1981, pp.146-165.

Curriculum Development Centre. Core Curriculum for Australian Schools. Canberra: CDC, 1980.

Dunphy, D. The Individual and the World of Work. In Australian College of Education. Education and The World of Work. Perth: ACE, 1980.

Education Department of Western Australia. Schools and Work. Discussion Paper No. 1. Perth: Education Department of W.A., 1978.

Hart, G. Career Education. Education News, Vol. 16, No. 9, 1979, pp.16-19.

Hobbs, T. Work Experience Evaluation, Second Interim Report. Brisbane: Research Branch, Department of Education, Queensland, 1981.

Hook, T. Work Experience for Teachers. Phoenix, Vol. 3, No. 1, 1980, pp. 67-94.

Karmel, P. Education and the Workforce. Education News, Vol. 16, No. 1, 1977, pp.12-17.

Karmel, P. Youth, Education and Employment. Hawthorn: ACER, 1979.

Karmel, P. Education and Working Life. Education News, Vol. 17, No. 1, 1980, pp.8-13.

Karmel, P. Vocational Education Warning. Education News, Vol. 17, No. 6, 1981, pp.32-33.

King, S.E. Attitudes of Australian Youth to Work, School and Unemployment: A review of Some Recent Australian Research. Unicorn, Vol. 7, No. 1, 1981, pp. 41-52.

Musgrave, P. Educational Aspects of Youth Unemployment. In R.F. Henderson (ed.) Youth Unemployment. Canberra: Academy of Social Sciences in Australia, 1977.

National Inquiry into Teacher Education. Canberra: AGPS, 1980.

Queensland Department of Education. Report on Work Experience in Queensland Schools. Brisbane: Department of Education, 1980.

Queensland Legislative Assembly. Report of the Select Committee on Education in Queensland. Brisbane: Government Printer, 1980.

Schools Commission. Schooling for 15 and 16 Year olds. Canberra: Schools Commission, 1980.

Schools Commission. Report for the Triennium 1982-84. Canberra: Schools Commission, 1981.

Senate Standing Committee on Education and the Arts. Preparation for the Workforce. Canberra: AGPS, 1981.

Sturman, A. From School to Work: A Review of Major Research in Australia. Hawthorn: ACER, 1979.

Sungaila, H. Continuing Education for Work: The Employers' Viewpoint. Unicorn, Vol. 7, No. 4, 1981, pp. 379-386.

Teacher Education Review Committee. Secondary Schools and The World of Work. Toowong: Board of Teacher Education, Queensland, 1981.

Williams, H. Education and the World of Work. A Matter of Values. Presidential Address. In Australian College of Education. Education and the World of Work. Perth: ACE, 1980.

Williams, T., Clancy, J., Batten, M. and Girling-Butcher, S. School, Work and Career: 17 Year Olds in Australia. Hawthorn: ACER, 1980.

SECTION 3

CONFERENCE REPORT

Secondary Schools and The World of Work:

Implications for Teacher Education

INTRODUCTION

The theme of the conference held at the Bardon Professional Development Centre on Saturday, 29 May 1982, was "Secondary Schools and the World of Work: Implications for Teacher Education". Its purpose was to bring together various groups with an interest in schooling and teacher education so that they could share their ideas on the school's role in preparing students for work and adult life and to consider the implications of developments in secondary schools for teacher education.

Some 130 people participated in the conference. These included teacher educators, teachers and principals, student teachers, educational administrators, employers and parents. A full list of conference participants is given after the report of the conference proceedings.

After the official opening, the keynote address was presented by Dr Don Anderson, Australian National University. Dr Anderson has a particular interest in the school-work relationship, being closely involved with the National Clearinghouse on Transition from School.

Following the keynote address, the conference broke into interest groups to consider the school's role in preparing students for work and adult life. A number of questions formed the basis for the discussion:

- What are the purposes of secondary education?
- In what ways do secondary schools prepare students for work and life? Taking into account that today's students will spend a major part of their working life in the twenty-first century, in what ways should secondary schools prepare students for work and life?
- What areas of study are essential for all students in secondary school? Should areas such as human relationships and living skills receive more emphasis? Should these areas of study be promoted to employers, parents and students as being a legitimate activity of secondary schools as opposed to more traditional academic concerns?
- How can the various areas of study be made more relevant to the future life roles of secondary students?
- Should there be a closer relationship between the worlds of work and school and if so how can it be fostered?
- What alternatives are there to secondary education for preparing students for life and work, e.g. as suggested by Crittenden?

The discussion groups were not expected to answer all questions. Rather, the intention was that the questions could act as a stimulus to the discussion. Following the group discussion of 75 minutes, a leader from each group was given five to eight minutes to report the group's findings to a plenary session of the conference. A short summing up of the group reports, emphasising the main themes arising, was then presented by Don Anderson.

In the afternoon, the conference again engaged in group discussion. The afternoon groups were mixed so that most groups contained at least one person from each of the interest groups represented at the conference. The topic of the afternoon discussion was "Implications for teacher education". The following questions were considered in the group discussion:

- What are the implications for pre-service teacher education of the secondary school's role in preparing students for the world of work?
- What are the implications for in-service teacher education of the secondary school's role in preparing students for the world of work?
- What are the implications for selection of teachers and student teachers?
- Should teacher registration requirements be relaxed so that those without teaching qualifications but with substantial experience of the world of work can teach in schools?
- Is there a role for work experience outside teaching either for pre-service students or for practising teachers; if so, how should it be organised?

How can pre-service and in-service teacher education assist teachers in preparing students for life roles?

Each group was asked to report on a particular question, but invited also to consider the other questions. Again, some six to seven minutes were allowed for reporting the results to a plenary session of the conference. The conference concluded with a short summing up of the day's discussion by Don Anderson.

Given the diverse range of backgrounds of conference participants, it was not expected that answers to all questions would be found or that consensus would be reached on all issues. It was felt, however, that conference participants would benefit from sharing their ideas and that the results of the discussion would be useful for others with an interest in the conference theme.

To provide conference participants with some shared knowledge of the current state of Australian debate and research on the school-work relationship, a kit of background reading material was prepared. This was sent to conference participants one to two weeks before the conference. It comprised:

- Board of Teacher Education report Secondary Schools and the World of Work (Section 1 of this publication)
- Board of Teacher Education report Secondary Schools and the World of Work: Some Recent Australian Literature (Section 2 of this publication)
- Summary of Schools Commission report Schooling for 15 and 16 Year Olds (Queensland Department of Education Document 58)
- Summary of ACER survey School, Work and Career (Queensland Department of Education Document 62)
- Summary of the report by the Senate Standing Committee on Education and the Arts - Preparation for the Workforce (Queensland Department of Education Document 64)
- Board of Secondary School Studies Information Bulletin, Vol. 10, No. 3, summarising A Review of School-Based Assessment in Queensland Secondary Schools.

From the reports of the group discussion it might appear that in many cases little reference was made to the background literature. As often happens, personal experience seems to have been a more powerful influence on discussion than research findings. Nonetheless, a rich range of suggestions for improving secondary education and teacher education emerged from the conference. There was considerable agreement among teachers, teacher educators, students, parents and educational administrators about desirable changes for secondary education. These are revealed in subsequent parts of this publication. The account of the conference proceedings begins with Don Anderson's keynote address "The Future of Work".

KEYNOTE ADDRESS

THE FUTURE OF WORK

Don Anderson

The National Clearinghouse[1] is concerned with Transition from School. The title was left open-ended, not specifying where the transition is to, because adolescents are involved in a number of transitions: from child to adult, from dependence to independence, through puberty to sexual maturity, from minor to legal adult, from dependence on parents to economic independence, from student to worker. Nevertheless almost all of the 200 or more abstracts which have been prepared since November 1981 have focused on one particular transition, that from school to work. Given the current unemployment situation this is understandable; it is important however not to forget that young people leaving school are involved in a complex and interrelated set of psychological and social transitions of which work is one.

In this paper I propose to discuss the changing significance of work in society; then examine responses schools could make to these changes; and finally speculate on some of the implications for teacher education.

The period during which most of us were inducted into work roles - the quarter century immediately after World War II - was exceptional. It was one of the longest continuous periods of sustained economic prosperity in Western history. It was a time of growth and full employment, it was a time of optimism, it was a time when we came to believe that science and technology could solve the world's remaining problems, banish poverty and usher in a golden age of plenty. It was a period of belief in schooling; for the first time ever a majority saw increased education as the principal means of advancing their life-chances, or if not of themselves then of their children.

In the last eight years all that has changed. We are now coming to see that we grew to adulthood in an abnormal period of history; that unemployment is more normal than not; that freedom from fear is not dispelled by miraculous technology, that equality and a fair share for all are elusive goals.

The young leaving school are experiencing a harsh economic world which we never had to face. In some respects it is harder for the young unemployed today than it was in the 1930s. In the Great Depression unemployment and poverty was worse than now, but whole families suffered and the young were not stigmatised, as many are today, because they could not find work.

The young today are conventional, competitive, pessimistic and a little afraid. Of immediate concern to all is work. This is not new in itself. Ever since social surveys have been conducted in schools the major interest of adolescents in work has been known. They view their schooling through vocationally tinted spectacles[2]. Now there is a nervous edge to this interest. Even among the bright ones there are some who are so anxious about getting a job that they drop education for a job-in-hand, rather than develop their talents by further study. As a result of this we have the paradoxical situation where, in a period of unemployment with the best jobs going to the most highly educated, there is an actual decline in enrolment by school leavers in university and colleges of advanced education.

The bright ones are thus taking jobs which could otherwise have gone to the average and below average students. It is the bottom third, ranked in school attainment, whose employment prospects are bleakest. Many will be out of work for long periods, or will remain on the edge of the labour market. Economists do not see a return to the growth conditions of the '50s and '60s; nor do they see youth improving their relative position in the market unless extraordinary steps are taken.[3]

In the longer term the new technology seems likely to produce undreamed of changes in the economy and in society; some good, some bad, depending on how we adapt to them. In a recently published book, Sleepers, Wake!: Technology and the Future of Work, Barry Jones argues that we are on the threshold of changes which are as great or greater than those which transformed the world after 1780 and the onset of the industrial revolution.[4] In the new post-industrial age, made possible by computerised operations which will displace human workers from industrial and service jobs, the production and distribution of goods will require only a tiny fraction of the present labour

force. Jones quotes Keynes who foresaw in 1936 what would happen:

> ... for the first time since his creation man will be faced with his real, his permanent problem - how to use his freedom from pressing economic cares, how to occupy the leisure, which science and compound interest will have won for him, to live agreeably and wisely and well ...

The traditional work ethic, says Jones, "will be declared irrelevant or counterproductive to society's needs. Compulsory leisure activities may be imposed on those for whom there is no place in the labour force".

Is it possible to envisage a society where work is no longer obligatory, morally or economically? Or to put it more precisely, where there is no working-class comprising the majority of the able-bodied population (there have always been societies with a non-working class but these have been an aristocracy or governing class). Consider the psychological and social needs which are met by work.

1. It is a source of income and economic security. The idea of working for a living is deeply ingrained in our psyches. In the Bible we are told that work was imposed by God as a punishment on the first man and woman for their disobedience. And St Paul commanded the Thessalonians "that if any would not work, neither should he eat".

2. Work is a source of personal identity. When two strangers are becoming acquainted, early in the process, perhaps after a polite remark about the weather, one will ask the other - not about religion, politics or sex-life - but "what do you do?" and thereby has a short-cut to his social status, education, interests and income. In making a career choice we match our self-image with images of jobs; but thereafter our vocation shapes our personality. Loss of work, even vacating a job at retirement can be accompanied by severe psychological disturbance.

3. Work structures time. For most of us our job provides the main temporal framework with which we arrange the events of the day, the week, the year and the greater part of our adult lives.

4. Work is the source of satisfying social relationships. Studies of job satisfaction show that friendships and social interaction with others, at tea and meal breaks, if not on the job, is the most valued part of a majority of jobs. (The same finding has been found in studies of what students like best about school.)[5]

5. Work provides intrinsic satisfaction for some. This is probably more widespread than is often believed. When there is some skill involved, and some autonomy, a job provides a sense of achievement and pride. This happens even when the objective circumstances of the work seems highly unattractive.

All of these things - income, identity, the structuring of time, social intercourse and intrinsic satisfaction - are pretty central to a healthy personality. If a person is deprived of one or more there may be psychological or social maladjustment. Freud was aware of this. It is said that, after a learned lecture of the psychic roots of neurosis, he was asked by a little old lady, "Doctor, what is your prescription for a perfect life?". The bystanders expected a complicated exposition of psycho-analytic theory, but Freud answered with three words, "Work and love".

We tend to make jokes about issues which are central to our emotional lives, it is a way of diminishing their threat to our egos: most jokes are about politics, religion, sex, race relations or work.

- The teacher, asked for a reference for Bloggs who wasn't renowned for his industry, wrote "any employer who gets Bloggs to work for him will be very fortunate".

- It is said that Pope John XXIII, asked how many people worked in the Vatican, replied, "About half of them".

There is evidence that, in a culture where work is central, those who are deprived of it are likely to become aggressive or to engage in problem behaviours such as excessive use of drugs, crime, depression or suicide. In a study in which I am involved, of youth in Australian and USA, there are matched groups of in-school and

out-of-school (mainly out of work) in both countries.[6] The out-of-school groups in both countries are much more likely to engage in problem behaviours. In the US the incidence is worse than Australia and our evidence shows that this is because there are more supporting structures in use here - family, youth clubs, and post-school education.

The questions which must be addressed, as society moves rapidly from the industrial era to a post-industrial service and leisure era are:

1. In the long term can the jobs which are disappearing from the mining, agricultural and manufacturing sectors be replaced with other work; presumably by expansion of service, crafts and home-based activities?

2. To what extent can the five human needs listed above which are presently met by work be satisfied by other activities?

3. In the short term what are the implications of youth employment for schools?

When we attempt to answer the second of these questions it can be seen how important it is that a satisfactory solution is found to the first.

- Can income be divorced from work? Obviously it can for some since many people get their incomes from investments, pensions, allowances like TEAS, or the dole. However there has never yet been a society where the majority were not expected to work for a living.

- Is a personal identity inevitably linked to work? Probably not, since throughout history there have been non-working classes who have found their identity in government, scholarship, or recreation. Whether an entire society could do this seems dubious since work is so deeply woven into the fabric of our culture. Of course at this point the distinction between work and non-work starts to break down. Is a hobby, from which you may earn some money, work? Is work that you don't have to do work; for example, voluntary social service? Is sport or entertaining only work when you are paid for doing it?

- Time can obviously be structured in other ways than by the discipline of work. By attending education classes, for example, or voluntarily imposing a personal regime of activity. Many do not find it easy to get back to work. We would, I suspect, be very uncomfortable with a seven-day weekend.

- There are clearly other arenas for social relations in addition to work - in the club or pub, in one's family, at college or at voluntary activities. Non-work institutions would, however, have to be strengthened in order to provide the continuity of association with others which occurs at work.

- The intrinsic satisfaction which comes from being "someone who is good at something" can also be provided by hobbies, crafts, specialised recreations and even domestic activities.

None of these needs is inseparably related to work. There would be however, a considerable period of adjustment before a culture emerged in which a majority did not have their major daily engagement in work-like activities. It is far more likely, in my opinion, that as society adapts to the post-industrial age the institution of work will remain. The challenge will be to provide satisfactory vocational roles for all who want them and to maintain a reasonably equitable distribution of wealth. The present movement seems to be in the reverse direction towards a more polarised society in which possession of a job separates the advantaged and disadvantaged; and in which the under-educated young are particularly vulnerable.

What can schools do in order to meet the needs of the bottom third - those who leave earliest, who get least from school and who need education most? There are three broad changes which must be considered.

The first is better education. You are as familiar as I am with the criticisms of schooling and the demands for a more relevant curriculum. Most educators are rightly suspicious of the idea of specific vocational training in school because of the likelihood that such training will disadvantage students by displacing general education, because it would reduce choice and close off options, and because it could lead to

redundancy as particular skills become out-moded. Nevertheless there is a dilemma here - if we are to motivate the bottom third there is abundant evidence that practical activities with vocational meaning are what they want. And a special pedagogy may have to be developed which extends general education by starting with the practical. Teachers with experience in other vocations may be better at this. Perhaps there is something to be learned here from the Victorian secondary techs - which appear to be attracting would-be leavers from conventional schools, public and private.

At the same time however, if work is going to be of reduced importance in structuring time then it is increasingly important that young school leavers are helped to become autonomous citizens - capable of directing their own lives in a society where traditional supports are disappearing and where exploitative forces seem to be increasing. Basically kids leaving school must be skilled in using words and numbers, and able to think clearly. These are survival skills in our culture. I don't think that standards have fallen; I do believe that old standards have become inadequate for a full life in an informative rich culture. School leavers also need an understanding of the society in which they will live, and the study of work would provide an excellent approach to this.

The second response to the present crisis is to lengthen the period of schooling by encouraging the early leavers to stay on, or to return so as to complete their basic education. There are educational, social and economic reasons for this. The standard of basic education required by the bottom third isn't being attained with nine or ten years of schooling. Perhaps we can improve existing practices; I believe however that we should also be aiming to provide the equivalent of 12 years of full-time schooling for all; there also should be incentives for everyone to continue general education in post-secondary institutions.

There is, of course, a manpower argument for increasing the duration of schooling in that it would delay entry to the labour market and thereby make the available jobs go further (equally we need incentives for people to retire from the workforce sooner).

Thirdly, if we are to encourage the lower third to stay on at school, or to return to it, radically new approaches to schooling are required. Most who now leave early do so (a) because they are weary of it, and (b) because getting a job is a way of fulfilling the adolescent drive to become an adult. The sharp boundary which exists between school and community, and in the present context, between study and work must be reviewed. There are already numerous curriculum proposals and activities: work experience, careers counselling, part-time school/part-time work, combined school and TAFE, provision for return to school after a period of work. Some of these depend of course on the availability of work and the co-operation of employers.

The evaluations which have been made so far indicate mixed success for these innovations. Work experience programs seem to vary from very successful to disastrous. Clearly the purposes of these programs have to be thought out carefully, the collaboration of all parties is required and built-in evaluations are needed. Evaluative reports on counselling and vocational guidance are not so encouraging. Most studies of students' career decision-making report that teachers and vocational guidance officers have had little influence, and to the extent that any individuals were influential, it was parents and close friends of the family. The results from these studies are so consistent that they must be taken seriously. It does not mean that guidance and counselling should necessarily be abandoned; it does, however, suggest that the conditions should be carefully examined, and that the frequent proposals for more guidance/counselling, career officers should not be adopted without careful thought.

The idea that education and school are coincident and coterminous is a deeply held one, among teachers as well as their pupils. It is institutionalised in the arrangement whereby schools cease to exercise any responsibility for their students' education once they "leave". A Schools Commission study remarked on how very few schools knew where their last year's leavers were. A radical innovation, which would help cushion the transition to post-school roles, would be for schools to keep in touch with their pupils for at least two years after they formally leave. There are several important purposes to be served by this. One is feedback; schools can only evaluate their programs adequately if they know how all of their pupils fare as they move into adult roles. But the responsibility is more active than this; many of their leavers will need help. After a few knocks in the labour market counselling and guidance has much more meaning to young people. Equally the idea of continuing one's education, perhaps returning to school, or to TAFE, assumes some significance after a period in the "real

world". Of all possible agencies schools are the best placed to perform this function of following pupils as they start to engage in post-school roles, and of providing active assistance when it is needed. The task would require considerable sensitivity since the main aim of many early leavers is to be rid of school and all that it stands for. The follow-up would, of course, need to respect the privacy and independence of the leavers; and most of the effort would be devoted to the few who have problems establishing themselves in the labour force or in post-secondary study.

A curriculum for the bottom third, increased retention rates and more transactions across the school-work boundary require, if they are to be successful, radically new structures. The ACT and Tasmanian colleges provide an example; the Victorian secondary techs another; the idea of youth centres discussed by Brian Crittenden is a third.[8] The new structures have to teach students autonomy by giving it to them, something which traditional schools find it difficult to do. One of the main reason why so many adolescents are anxious to leave early is that schools are institutions designed for children but inhabited by young adults. In our studies at ANU of traditional six-year high schools and secondary colleges we argued that, when the age range is from 11 to 17 years, the school regime is adapted to the task of keeping order among the youngest group. Teachers find it difficult to accord adult status to their older pupils in the way that trade lecturers do to students of the same age. We found that in ACT, when the six-year secondary school was split into a 4 + 2 system with the older adolescent in separate secondary colleges the extent of student alienation in years 11 and 12 dropped dramatically.

What is required in teacher recruitment and education? Obviously the prior life experience of the recruits should qualify them for the professional roles they will have after training. It is striking however, that the major professions - engineering, law and medicine as well as teaching - all recruit in the most inappropriate manner. Medical practice requires human sympathy as well as technical skills yet selects exclusively from the young swots who can get themselves to the top 1 per cent of exam results - arguably a group who would know least about human suffering. Law, which one would think should have a special concern for the poor and dispossessed, recruits more than other occupational groups from the privileged upper strata of society. Engineering, which is being faced with increasingly difficult value decisions between technological advances and effects on the environment, recruits students who are more dogmatic than any other. And the teaching profession, which has the central task of passing on to each successive generation the best of our rich and complex culture, selects immature young people who have had little life experience outside their own families and school. On top of that we confine student-teachers to the company of their own sort in single-purpose training institutions or courses. This pattern of recruitment would seem to be inappropriate at any time, but in the present era of change it can be positively dysfunctional. Rather than continuity, discontinuity is required so new teachers do not unthinkingly perpetuate the approach to teaching which they experienced in their own school days.

There are various ideas for achieving this discontinuity and diversity of experience among teachers; for example, the selection into teacher training of older persons who have been successful in another vocation, industrial leave for practising teachers, and the use of experts in various areas but without teaching qualifications to supplement the core of traditionally trained staff. Perhaps teaching should not be seen as a life-long vocation; rather individuals should have the opportunity to transfer in and out of teaching as part of a professional career in public service. It would be valuable to make the point at the outset of pre-service professional training that education does not cease with school, nor should the teachers' responsibilities. One very effective way to do this would be to have, as an essential part of pre-service curriculum, a requirement that student-teachers take part in a project which traced a representative group of school leavers, interviewed them at length and evaluated their school education in the light of subsequent experiences.

If schools are to meet the needs of the depressed third - those who when they leave will form the young "under-class", at the bottom of the social heap, then the transformation in school structures and in teacher roles will have to be immense. Perhaps we may need new institutions not called schools; colleges, technical institutions or youth centres may be terms about which early leavers to not have strong negative feelings.

In a sensitive case study of a South Australian high school Colin Power[9] reveals how difficult it is for teachers, whose own work socialisation has been with academic

classes, to adapt to the needs of the average and below average student. The development of resentment, and ultimately the alienation of many students in the lower stream is shown as these young people come to realise that they are labelled as "dumb" or "bludgers" or "no-hopers". In his analysis of school-rejection Power delineates the responses of those students who find it difficult to gain teachers' approval, or to avoid disapproval. Some play a withdrawal game, distancing themselves from teachers and school, trying to be faceless and unnoticed. Others become sullen and practise passive non-co-operation. In the extreme students who feel "picked on" by teachers vent their frustration by "stirring". Anti-school peer groups form and provide members with mutual support in their opposition to school and their intention to leave early.

It is not within my competence to make detailed proposals for teacher education; there are, however, some new directions to be followed if the needs of the bottom third are to be met. In recruitment attention has to be given to attracting more older persons who have had life experiences outside the classroom and training college. Within pre-service training student teachers need to become directly involved with the problems of those adolescents who, under present circumstances, are the early leavers. This could involve taking part in a follow-up project with such students - perhaps helping conduct interviews at the point of leaving and, six and twelve months later, at work or in unemployment. The project might also involve assisting with programs for those willing to resume education.

Changes in teacher education are, however, only part of a much larger strategy needed for helping those young people who get least from education but who need it most. New sorts of institutions are required where young people do not feel "put down" but rather are accorded the respect and autonomy which so many feel they do not have at school.

References and Further Reading

(Numbers after references refer to citations in text)

For a comprehensive set of abstracts of recent Australian research and opinion see -

- Anderson, D.S. and Blakers, C. Transition from School: an Annotated Bibliography of recent Australian studies. Canberra: ANU Press, 1980.

- National Clearinghouse on Transition from School, c/o Sociology Department, RSSS, Australian National University, Canberra - prepares regular reviews and abstracts of current Australian and some overseas studies. (1)

For studies of transition and youth unemployment from a variety of social science perspectives see -

- Baird, C.E., Gregory, R.G. and Gruen, F.H. (eds.). Youth Employment, Education and Training. Conference Papers. Canberra: Centre for Economic Policy Research, ANU, 1981. (3)

- Anderson, D.S. and Blakers, C. (eds.). Youth Research and Social Policy. Canberra: ANU Press (in press).

For studies of schools and adolescents and youth needs see -

- Connell, W.F., Stroobant, R.D., Sinclair, K.E., Connell, R.S. and Rogers, K.W. 12 to 20: Studies of City Youth. Sydney: Hicks Smith, 1975. (5)

- Wright, A.F. and Headlam, F. Youth Needs and Public Policies. Australian Council for Educational Research Report for the Victorian State Department of Youth, Sport and Recreation. Melbourne: Department of Youth, Sport and Recreation, 1976.

- Anderson, D.S., Saltet, M. and Vervoorn, A. Schools to Grow In. Canberra: ANU Press, 1980. (2)

- Australia. Schools Commission. A Study of the School Experiences of 15-16 year olds. Canberra: Schools Commission, November 1980.

- Biddle, B.J., Bank, B.J., Anderson, D.S., Keats, J.A. and Keats, D.M. The Structure of Idleness: In-School Dropout Adolescent Activities in the United States and Australia. Sociology of Education, Vol. 54 (April) 1981, pp. 106-119. (7)

- Crittenden, B. The Identity Crisis in Secondary Education. The Australian Journal of Education, Vol. 25, No. 2, 1981, pp. 146-165. (8)

- OECD. Education and Work: The Views of the Young, Paris, 1982 (restricted). (7)

- Power, C. The Purdah Experience. The Flinders University of South Australia: School of Education, 1982. (5, 9)

For an analysis of changing technology and prediction of the effects on work and society see -

- Jones, B. Sleepers, Wake! Technology and the Future of Work, Melbourne: Oxford University Press, 1982. (4)

MORNING DISCUSSION GROUPS:

THE ROLE OF SCHOOLS IN PREPARING STUDENTS FOR WORK AND ADULT LIFE

Group A – Teacher Educators
(Reporter: Colin Collins)

There were three points we wanted to raise before making suggestions for the improvements that could be made in secondary schools to strengthen school-work links.

Reality of work

Firstly, we felt that it was important to realise that work is a reality and so, although secondary schools should be concerned with preparing students for life, they should not neglect the important role work plays in our lives. Schools should also take into account the changing nature of work. The reality of work is that there is a lot of employment in the workforce at the moment, but there are also many people who are not going to get jobs at all. We would therefore expect that leisure will have an increasing role in modern societies.

The second point about the work reality concerns the issue of deskilling. It's constantly argued that we need better educated students coming out of schools. In our group, the point was made, however, that the sophisticated technology, while requiring a small minority of people to have a better education, may mean that a large group of workers need to be deskilled. This has to be taken into consideration when thinking of secondary schools.

Streaming of pupils

A second issue which we considered was streaming. There are three major groups of students who go through schools. There's the upper one sixth who, coming from certain kinds of backgrounds, go to universities and CAEs. These students follow largely, although in a hidden kind of way, the academic stream. Then there's a large group in the middle. Finally, there is the third group, the so-called "at risk" students, the one third down at the bottom. We did not solve the problem of streaming, but we recognised that it was a problem.

Certification

Thirdly, the very strong opinion was voiced by some members of our group that certification was the main barrier to any major changes which could be brought about in secondary schools. The question was raised whether certification was appropriate at all in secondary schools, except perhaps for the top one-sixth who went into colleges of advanced education and universities. Indeed, the question was raised whether there should be any so-called "gatekeeping", not only in terms of certification (diplomas and certificates and so on) but also whether it was possible to judge the competencies required to go into the workforce.

So, although we didn't come up with any positive solutions, we established those three areas as a background to any changes which would improve the relationship between secondary schools and the life and work situation afterwards.

We now turn to some of the characteristics of the changes that we felt were desirable, although there was strong dissension in the group.

Schools for work and leisure

The first point, which was generally agreed to by all, was that schooling is certainly not only for work alone, but it is also for leisure. This is particularly important in our age, when, as I have said before, there are going to be many people who are probably not going to work for all of their lives. There was a strong feeling in our group, therefore, that ideas and the structural realities of work, leisure and education itself should be integrated.

Choices for students

The second point is perhaps the strongest one that emerged from our discussion. We felt that, at a certain stage in education, either at the end of primary education or at the beginning of secondary education, there

should be choices for students. All students should not be obligated to going through the same kind of secondary education. To a large extent, the choices should be in the hands of students themselves.

Training in choices

This leads on to our third point which is that students, particularly in secondary schools, should be trained in how to make choices. The curricula should be orientated towards life outside of schools, for example, work realities, the realities of family life, political life, economic life. These realities outside of the school should be brought back into the schools so that students are taught about life, about how to make choices concerning it, and above all, about how to make choices concerning the continuance of their own education.

Structure in schools

The suggestion was made, but not necessarily agreed to by everyone, that in order to facilitate student choice the present arrangement whereby there is more structure in secondary than in primary schools should be reversed. We should have more structures in the primary school, but by the time children get into the secondary school, particularly in Year 10, they should be involved in making multiple choices. Going hand in hand with this, programs in the secondary school should offer a wider variety of programs. But above all, secondary school students should be taught how to make choices for themselves.

Continuing education

In association with that, a very strong suggestion was made that those students who choose to opt out of the school system should be able to re-enter it at some later stage. In fact, schools should be centres of continuing education.

Community involvement

Linked with that, we felt that the community should have a far greater say in what is going on in the schools. This does not only mean employers, it means parents and so on. It was suggested that it is ridiculous to have the schools used for a very small amount of their time. Rather, access should be total.

Organisation in secondary schools

Our final suggestion is that our secondary schools need a fairly radical re-organisation. They should be multiple purpose, they should be flexible and, above all, they should be continuing. We shouldn't only have children in our school, we should have adults as well.

Group B – Teacher Educators
(Reporter: Jim Farrell)

Traditional organisational structures of secondary schools

We acknowledged that many of the traditional dimensions of secondary school are probably inevitable and not necessarily undesirable, for example, certain kinds of timetabling and scheduling in the organisation and certain kinds of certification outcomes. We adverted to the fact that many of these dimensions had probably not changed in secondary schools for twenty years.

Emphasis on informality

In general, we considered that the formal requirements of secondary schooling should be de-emphasised and far more time should be given to the informal. We recognised, however, that there will be some social expectations which might have to be changed before the change in emphasis to the informal becomes acceptable in society. Hence the need for promotion of the acceptability of learning in informal ways. The means of achieving this are as yet unclear.

Schooling for life

If it can be accepted that in the future not everybody will be working for large parts of their life, then the notion of schooling for life becomes more important than simply schooling for work.

Essential skills

We recognised that some skills will be needed no matter what the future holds. We wanted to emphasise communication skills, numeracy and manual dexterity. Some of the process skills such as willingness to learn, learning how to learn and human relationship skills are also important. Again, we acknowledged that some of them are being treated in schools already. We

also recognised that many of these skills are not necessarily taught best through devising a syllabus in which to teach human relations or the like. There are many other ways of teaching some of those process skills.

Blending school and work life

If we see reasons for trying to keep some children at school for longer than they are staying at present, then it becomes imperative to blend the life of school with the life of work more than is currently happening. Work experience is one way of achieving this, although at present work experience is often a cosmetic activity. We think there can be something more substantial. Work experience can be sold to industry on the grounds that it has already been shown to be cost effective.

Flexibility

There should be some flexibility with regard to the times at which secondary school children attend school. The compulsory notion might be replaced by some kind of flexibility which allows dropping in after having earlier dropped out. Flexibility needs to start early, probably at Year 8.

Alternatives to secondary school

We also noted the very valuable potential role of technical and further education (TAFE) and suggested strong links should be forged between high school and TAFE colleges. Another alternative we discussed was a community college in which both children and adults from the community learn together. We discussed briefly the Chinese model of the factory school. Finally, we felt that it was inevitable in the future that a great deal of learning would be done at home through computers.

Group C - Teachers
(Reporter: Col McCowan)

Delay of specialisation

The first point we discussed was the move to delay specialisation in schools. We felt that crucial subject choice and therefore occupational choice should be delayed until at least Year 10. Coupled with that, the integration of subject areas and the breaking down of subject disciplines was seen as vital because that is one of the major problems in the choice structure at the moment.

Developing student self-respect

Our second major point was concerned with developing student self-respect. We felt there were students who were developing self-respect through the traditional academic disciplines. We need, however, to reinforce the non-academic disciplines, and allow students to have some self-respect and worth for doing those. To take a simple example: if there were a three year major in an arts degree on driver education, then driver education would probably have the same respect that history has. At the moment there is no respect for those sorts of areas in schools and students have little opportunity to develop self worth and respect from them.

School reorganisation

Our third point was that if the likely increase in retention rate comes about, then we will need to break down schools both into smaller units and into different configurations. The configurations would incorporate community and industry and allow students to move in and out of the school setting and participate in a range of activities.

Hidden curriculum

The fourth point was that the hidden curriculum, if possible, should be surfaced and attacked front on in two ways. Firstly, life skills should be a central focus of schooling. Secondly, students should experience flexible organisational instruction, so that the hidden curriculum does not prevent students thinking flexibly and making real choices.

Motivation

We discussed the problem of how to motivate students in Years 8, 9 and 10 to learn to prepare for some of the frustrations which they will experience. But how do we prepare them for those frustrations until they actually experience them? We suggested that there needed to be a change in organisational structures so that students can experience, or at least find out about, the lives of others, and therefore perhaps increase their motivation. We were concerned about the pressures from employers and the community generally for increased literacy and numeracy skills. This would be of little use if students were not motivated. On the other

hand, if they were too motivated we faced a second problem: we might be preparing happy factory fodder. People doing their shorthand and typing and may not be thinking about the broader options that will be facing them. Students should therefore be prepared for a wide range of possible futures.

Financial incentives

The last point that we raised was one of financial incentives. If students were given financial incentives for staying in school, they would be able to develop their independence needs, which at the moment cannot be developed because they are totally dependent upon the family structure.

Group D - Teachers
(Reporter: Cec Burr)

The majority of the teachers in Group D seemed to be involved in careers education so the recommendations are coloured in that direction.

Human relationships

There should be studies in human relationships in schools and these should be over all courses and not offered as a separate course. In some schools, an integrated approach has been tried on a small scale. For example, certain subjects are taught by the careers education teacher for one period a week.

Careers education

There is presently a fairly well-developed careers education course available. Judging from the accounts given in the group, it is very successful but it is not very widely used. This course is being used to cut across subject area boundaries.

Work experience

With respect to student work experience, our group thought that work experience was important for all Year 10 and Year 12 students, not just those who may be leaving to go into the workforce. Work experience must be carefully organised. Part of the organisation involves being careful not to saturate the market - employers in some areas are reaching saturation point. It is important also that work experience is followed up in the school to ensure that the experience is worthwhile.

Student goal setting

Students should be helped to set their own realistic goals for the future. Teachers in our group from two different schools reported on a course in which, during the first three weeks of school, students research what they would like to be and what they would like to do. They then weigh this up against their own ideas of themselves and see whether or not their expectations are realistic.

Group E - Teachers
(Reporter: Margaret O'Donnell)

Future work patterns

The first area we looked at was the likely future work patterns for which we were preparing students. We tried to find some particular key issues in those work patterns that would be different from what has existed in the past or exists at present. From our point of view, there were two particular differences. One was the reduced amount of time spent at work, whether through shorter working days or through unemployment. The second point was the need for constant retraining throughout one's working life. We had quite a dispute about how much retraining that would involve and how many different types of jobs people might be likely to have. But we were in agreement that there would be a fair amount of need for changing, for flexibility and for retraining throughout life.

This led us on to a discussion of what we ought to be teaching. While we did not come up with any definitive list, we raised a number of points which we felt were important.

Curriculum organisation

We discussed the pros and cons of the academic versus the practical and so on, but we thought that the most important idea was that the traditional organisation based on subjects was not always the most appro-

priate method to teach students. We did not suggest that we threw the baby out with the bath water, but simply that for some groups of students the subject orientation was not the most appropriate method.

Teaching philosophy

The philosophy behind the teaching is as important as what is taught. Teachers should be committed to the development of self respect, to the development of respect for competencies other than the academic, and so on.

Lifelong education

Stemming from our idea of retraining was the notion of lifelong education. We felt that there should be provision and encouragement for people to enter and re-enter the school system during the course of their lives, particularly within five or six years from their first exit.

Flexibility

Some of the changes we suggested were flexible hours, for example, opening schools at say seven in the morning and keeping them open well into the evening, and flexi-timing the timetable and the teachers to make as much use as possible of the facilities which existed. Flexible structures are needed, for instance to allow people who are 19 or 20 to study Year 10 maths if that is what they want.

So, we saw a need for more flexibility in the use of school and in the ways in which people would be placed in classes. This applies both to students who were there for the first time and those who were coming in after a break from schooling.

Teaching students how to learn and how to think

We finished by wondering about the accuracy of our speculations about the future. There might be just as much chance that we were wrong as right. So we decided that probably the main focus of schooling should be teaching students how to learn and how to think. That should underpin everything else. It would not matter particularly how we organised it. But as long as we helped students to learn how to learn and how to think, we would be helping to prepare them for their future.

Group F - Parents
(Reporter: Leo Dunne)

Life skills and self-esteem

Learning of life skills and the development of student self-esteem are important outcomes of secondary schooling. Many secondary school students have low self-esteem. We felt this was closely related to the school climate. Although the development of self-esteem was recognised by schools, we felt it was not truly addressed in the curriculum.

The need to develop those skills and initiatives to cope with life rather than to attempt, within the secondary school, to prepare the person just for work was seen as important by our group. If a person has those wider skills and initiatives, then he or she is able to take on the necessary training for particular professions or trades. Moreover, he or she has a better rounded personality, is able to cope with adjustments and is better equipped to continue the learning process.

School climate

School climate, which is influenced by the relationship between parents and teachers and between students and teachers and administration, is very important in developing self-esteem in students. A healthy school climate can be fostered when parents, teachers, administrators and students work together in a real partnership to achieve common ideals.

Early labelling

We believe that the problems that the bottom one-third of students often face in secondary education and in the transition to post-school roles have their origin much earlier in the student's education. At the Year 2 or Year 3 level there are children who, for many reasons - immaturity or just failure to achieve are two examples - move to the bottom of the class, immediately losing self-esteem and sometimes losing the teacher's interest. We need to address this with a very well-considered response. Certainly in pre-service education, student teachers should be prepared to cope with these students. Teachers should be aware that many pupils tend to become uninterested in school very early in their education. This

causes many problems for students and schools which tend to remain throughout the student's schooling.

Adequate resources

It is obvious that added resources are needed in schools to finance the sorts of changes that have been discussed above. The [illegible] period of education and the schooling process is too important to the whole life of the student to ignore proper preparation because of a shortage of funds.

Tertiary entrance

Turning our attention to tertiary entrance, we felt that it may be very difficult to find a better alternative to the Tertiary Entrance Score. However, there are just so many unsatisfactory features attached to the TE Score that at least some alternatives should be investigated. Don Anderson mentioned one of the disadvantages of the TE Score in his reference to the selection of medical students but there are many other disadvantages. Change in selection procedures probably has to come from the universities so that the rest of the community do not accept the TE Score as the measuring rod for students.

Increasing years of schooling

We considered the suggestion of keeping students at school for longer periods. We do not disagree with that at all, but the compulsory school attendance for longer periods probably has disadvantages for the students and for the school and school environment. But if the changes for schooling suggested earlier could be taken on seriously, then students may want to stay. We believe this would be a great advantage.

The adaptive school

Finally, to sum up our thoughts about schools, we endorse the notion of the adaptive school put forward in the Schools Commission report Schooling for 15 and 16 Year Olds. That is:

- warm and friendly relations between students and staff, based on mutual respect;
- a range of course options which gives the emphasis to both practical and theoretical knowledge and to practical and academic skills;
- comprehensiveness, not merely in the range of students for whom they cater but also in the range of educational services they offer;
- an awareness that the prime purpose of their existence is to serve all students while they are within the compulsory schooling period;
- programs consistent with the notion that all post-school options for students require them to be able to function autonomously and effectively;
- close connections with the community being served and through it with the wider society.

Group G - Principals
(Reporter: Ken Gilbert)

Commitment to clear goals

In today's modern society, our schools need a heavy commitment to a clear set of goals. We need to operate positively and confidently with clear purposes in a society not marked by these characteristics.

Integrated school system

Secondly, we felt a more integrated school system with less divisions and more working together was needed. There should be integration across the pre-school, primary, secondary, tertiary and TAFE sectors. This needs to be more than just talking to each other. Our group raised issues about whose responsibility various things were, and whether we were duplicating a lot of our effort because of lack of integration across the various sectors.

Success experiences

School life should provide opportunities for students to experience success and it should provide experiences relevant to the lives of students in the school.

Experimentation with school structures

We felt there needed to be some experimentation with different school structures. Why not a secondary junior high school structure in large urban centres? The principals in our group from country centres felt that it was not necessary there as their schools tended to cater adequately for students in the lower secondary year levels. But some of the members of our group in large urban centres felt that a trial in the State system would be worthwhile.

Group H - Principals
(Reporter: Ray Barrett)

Purposes of secondary education

We made two points concerning the purposes of secondary education. Firstly, education should be a preparation for future life in the community - that is adult life, leisure and lifestyle. This includes work. Secondly, students should be made aware of their responsibilities to themselves and society, as suggested in Recommendation P1 of the Review of School-Based Assessment in Queensland Secondary Schools.

Societal expectations

While there are many programs in secondary schools which aim to prepare students for work and life, by and large they are not catering for the bottom one third of students. But we are probably doing what society expects. Societal expectations in relation to unemployment and so on may have to change along with the schools.

Balanced education

We strongly supported a balanced program of education with preparation for work as one aspect. We support a balanced general education for students within which work and other activities fit and we endorse the Curriculum Development Centre's paper Core Curriculum for Australian Schools which talks in terms of areas of knowledge and experience. The academic versus practical debate, whether we concentrate on subjects or whether we concentrate on students, whether we concentrate on educational objectives or socio-economic political activities are all issues impinging on the question of essential areas of study. We felt, however, that a balanced general education is of prime importance. Within this balanced education, specific problems can be considered. For example, there is a need for human relations and living skills. Many schools are fostering these skills in their students, but as a part of a balanced educational program.

Life roles

In relation to future life roles of students, it is the equality of outcome which is important rather than equality of opportunity. Individual subjects can be made more relevant to future life roles by using examples from the real world. For instance, it is possible to take examples in mathematics and relate them to everyday practical life without distorting the nature of the subject. Using examples from the everyday world of the 1980s could be done with most subjects.

School-work relationships

There should be closer relationships between school and work. At present, this is happening in a cosmetic way, for example, career days, employer days and work experience; teacher work experience has been trialled in a number of schools. The problem is that if a person goes out and works for a week or on ten weekends behind a counter at Woolworths or something similar, only a superficial understanding of the world of work can be gained. A more extended and intensive exchange between schools and the world of work to strengthen the school-work relationship is needed.

Alternatives to secondary schools

The environment of the secondary school should be changed to be more responsive to the needs of the bottom one third of students. But even if that happened, there would still be some students who would not survive. We might therefore need alternative structures to secondary schools such as youth centres, junior high schools and senior high schools, community colleges and TAFE.

Group I - Employers
(Reporter: Ron Edwards)

School emphases

There was common agreement in our group that literacy, numeracy and communication skills and an ability to understand one's self were very important. The student has to come to grips with understanding him or herself better, particularly in terms of his or her own awareness, spontaneity, autonomy and politeness. There should be some emphasis in the schools on teaching attitudes towards work and more importantly, attitudes to living in the community. A continuing education program could have a role to play in this.

New technology

New technology, particularly the use of computers, has led to increasing pressures on employers to get things done quickly. Employers therefore have higher expectations of their employees. Moreover, with increasing labour costs, computers are taking over more and more of the tasks previously undertaken by people, leading to some unemployment. Because unemployment is high, employers are able to pick the cream of the crop. So the greater part of the bottom third of school students are considerably at risk. They are not getting a run in employment, and they are not likely to in the current climate.

Industry-education liaison

Our group suggested that we should set up a structure from both industry and education to face up to the problems to which Dr Anderson referred in his keynote address. We know and talk about a lot of these problems, but we do not often do much about them. Both education and industry are shirking their responsibilities, basically because they do not know where to start. I think that is particularly so of industry. Perhaps the educationists may have some ideas, but even then there is a degree of uncertainty.

Group J - School Authorities
(Reporter: George Berkeley)

We decided to concentrate on the third topic in the program leaflet and to look at curriculum, in other words, to look at what is happening in schools. We use schooling in the broader sense of educational institutions and consider organisational structures, and particularly their role in supporting what is happening in schools.

We made the early point that, while we recognised Dr Anderson's concern for the problems facing the bottom third of the school population, in today's society the school is taking over many of the functions of the extended family and many of the considerations of the problems need to refer to the total school population.

Authenticity in schooling

In looking at the question of curriculum and what happens in schools, we thought that the school experience needed to possess more authenticity. Authenticity is used as a more embracing term than relevance. Relevance generally refers to the meaningful relationships of subjects to the outside. All school experiences should be meaningful and authentic, in those terms.

Longer years of schooling

We supported, with very considerable discussion, the notion of longer schooling, again using the broadest interpretation of schooling. We supported it for a number of reasons. While we recognise that it would for a term reduce some of the labour market problems that presently face us, there would be a catch-up situation . Rather, increasing schooling was important because it would give educators and trainers more chances in developing maturity. We thought that maturity was important for young people facing the complex outside world today. Longer schooling was necessary to enable more attention to be given to skill-based development, but that it was also necessary that continued schooling not neglect general education. Continued schooling should not just be more vocationally specific but the component of general education should continue.

Developing the autonomous person

The key to our discussions was that schooling should be very much concerned with the development of the attributes of an autonomous person. The notion of an autonomous person was not just the development of attitudes - attitudes almost have the assumption that you know what kind of attitudes should be taught. It is the development of awareness - students' self-awareness and awareness of the world around them - sensitivity, and the ability to make decisions - even though some of those decisions will be wrong. And we think students should be given the opportunity to make wrong decisions and to realise the implications of those.

Structures to support autonomy

The whole notion of developing an autonomous person should occur in a supportive environment. That led us into a consideration of structures. We concentrated on structures which will support and increase interaction. We discussed community-based learning with employers, with industry, with the world of work, with other youth, and so on. The whole notion of interaction is extremely important. Structures should be supportive in the development of the autonomous person. They should be less restrictive.

Antecedents to secondary schooling

We did, however, make the point that while this conference has concentrated on secondary schools, the secondary school does not stand alone - it does have antecedents. It is important therefore to develop a straight-through curriculum. In other words, the continuity of a K-10 curriculum is important to many of the things which we are proposing. The development of the autonomous person must commence at the start of education. We recognise that there can be differences after the end of compulsory schooling and that Years 11 and 12, the post-compulsory years, need to cater for many other alternatives.

Alternative structures

Finally, we briefly discussed some of the alternative structures. We did not believe that the secondary school should be done away with overnight, but we did believe that there should be more investigation of alternative structures. Some of the rearrangements we floated included the notion of primary, middle and secondary schooling, 3 years/7 years/2 years or 4 years/4 years/4 years or 10 years/2 years. It is important that a continuing examination be made of supportive structures to improve the curriculum of the secondary school.

Group K - School Authorities
(Reporter: Michael McDonald)

School flexibility

To meet the needs of students and of society, schools need to assume a wider role than they have in the past. However, the lack of flexibility of the school, illustrated for instance by the school timetable and the physical structure of the classroom, make it difficult for schools to change. Schools therefore need to determine ways of introducing more flexible structures.

Certification

Another major constraint to school change is linked to certification. The apparent need for a certificate at the end of ten or twelve years of school seems to have a very dampening effect on what is able to happen in the school. The external pressures for certification affect the internal operation of the school.

Return of older students

The return of students outside of normal schooling age is another area in which schools need to become more flexible.

Non-traditional areas of study

The infusion of various non-traditional aspects into the curriculum has been a successful way of introducing flexibility into the school curriculum. However, these changes tend to be on an individual school basis and changes that occur in that way are usually slow. Changes in society, particularly technological changes, are occurring much more rapidly than the schools are able to incorporate them into their curricula. There appears to be a distrust of non-traditional methods or subjects in schools. Whether adding various non-traditional elements to the curriculum will allow them to permeate the whole curriculum is an interesting question. Another major problem is convincing parents that there is value in students taking non-traditional courses. There is certainly a risk in taking

them because, at present, success in traditional school courses appears to be a prerequisite for tertiary studies or entry into certain types of occupations.

Community involvement in schools

Finally, we considered community involvement in school decision-making. The community appears to have lost faith with some schools. The possibility of communication between the various groups involved in education with a view to discussing problems and finding solutions should be investigated.

AFTERNOON DISCUSSION GROUPS:

IMPLICATIONS FOR TEACHER EDUCATION

Group A
(Reporter: Colin Collins)

Pre-service teacher education

If pre-service training is to be maintained and if school curricula are going to emphasise survival skills and schools are to become more flexible, then the three qualities that pre-service training programs should have would be: the emphasis on life skills, the emphasis on human relations training, and the emphasis on community experience.

Work experience for teachers

With regard to teachers already in the system, there should be opportunities for them to have more non-teaching work experience. We certainly would like to have the question of whether teachers can take a year or two off to gain work experience and then come back into the teaching system answered. How exactly is that going to be managed?

Contact with community

It was suggested that schools make themselves more available to the community. Different kinds of people could be brought into the schools, both from the world of work and from other aspects of life, to lecture the students. This would make a pleasant change from teachers.

Human relations training

The third point concerning teachers in the system is that there was a fairly strong feeling within our group that human relations training should be a necessary component of in-service training.

Irrelevance of pre-service

If we are really going to look at survival skills, and be flexible in the school then most of the pre-service training that is being done in universities and colleges of advanced education (CAEs) is not really relevant. This is because of its subject centredness. It caters almost exclusively to the academic stream of 20 per cent of the students who are going on to universities and CAEs. It is, as it were, that a very elite group is simply reproducing itself. Most of our pre-service training is just reproducing the training of particular kinds of students who will enter the universities and CAEs. The result is that teachers are not being trained at all to teach 80 per cent of students, and particularly the 30 per cent lower down in the socio-economic scale. They are being trained to teach largely the very small minority in the academic stream. For that reason, we not only thought that most of the pre-service training programs were irrelevant and misguided, but some of us even thought that they should not be there at all.

Alternatives to pre-service

What do we put in its place? Several suggestions were made. One of the suggestions was that students aspiring to be teachers should be sent out into the work world for two or three years. Another suggestion, which has been made in the past, is that we revert back to the situation in which aspiring teachers go into the school system for a couple of years, and only after that experience would they come back into universities and CAEs in order to receive their teacher training.

In-service training

In-service training should be the main emphasis in teacher education. Teachers who are really concerned in remaining flexible and being concerned with survival skills should have their training continually updated. The whole concept of continuing education should be emphasised. Teachers should either be constantly taken out into the world of work or have programs on human relations training or similar themes. In-service training should be considerably updated and be complementary to any pre-service training. But generally speaking, the feeling of the group was that if we are to emphasise and carry out the suggestions for changes to secondary education that we were given by most of the groups, then most pre-service training is almost completely out-dated at the present moment.

Group B
(Reporter: Jim Farrell)

In-service training

In general, we certainly said that some kind of in-service training was needed if teachers were to be better informed about the world into which they were sending secondary students. Part of that in-service training ought to do with skills but a great deal of it ought to do also with attitudes. Part of those survival skills which teachers need to provide to every child leaving school are communication skills and numeracy skills. If those skills are really to be provided for all students leaving secondary school, then teachers in secondary schools need to know how to provide remediation in those basic subjects. The point was made that the in-service courses that achieved most are those that are undertaken voluntarily.

Awareness of students' experiences

We realised that, while various kinds of in-service courses might attempt to make up certain deficiencies that exist in many teachers, it was of prime importance that teachers should gain insights about the rest of the world in which they may have little experience. Teachers need to get to know how the other half lives. What's the other half? To illustrate, many teachers are teaching students who, in much of their school work, will be experiencing failure when, on the other hand, the teachers themselves have not experienced a great deal of failure in scholastic work. There are many ways in which these insights can be gained, if they have not already been gained by teachers. In-service courses may in the long run only be one way, and not necessarily the best way, of furnishing those insights.

Teacher awareness of reality

More specifically, teachers need to relate their subjects in a practical way to the world outside the school. While teachers need to know how the other half lives, we questioned whether there is some exaggeration in the claim that teachers are out of touch with reality. There are many aspects of teachers' lives that come into contact with the world outside the school.

Recruitment

We saw some advantage in mature age entry to teaching. It is desirable that some criteria be used in the selection of teachers, but we also recognised the difficulty of applying those criteria. We were not sure of the best place at which to apply them - on selection for training or on selection for employment. I suggest that perhaps it might be better at employment in the hope that the teacher training course itself may do something to affect those people who have decided to go into teaching.

Work experience

We did not go as far as to say that a prerequisite for teaching ought to be some years of work outside of teaching. That itself would clearly not be a really satisfactory solution. If it were clear that all teachers who came in as mature age entrants or all teachers who have had some other experience are good teachers, then work experience outside teaching could be made mandatory.

Registration

We were not prepared to say that people ought to be registered as teachers simply on the grounds of experience outside teaching. At present, resource people are brought into the schools and these people will continue to contribute to the development of life skills in students. The possibility of implementing a registration system for people like this to give more recognition to their tasks might be considered. We are not suggesting that they be registered as teachers, but they could be given some other title, for example, instructors. Teacher registration should be more flexible and more individualistic, without lowering the standards of entry to the profession. These two things do not have to go together.

Group C
(Reporter: Col McCowan)

For every statement our group made, there was a contradictory statement. For example, we started with the Board of Teacher Edu-

cation's survey report Secondary Schools and the World of Work and there were three or four different interpretations of the same table in that report.

Teacher work experience

Nevertheless, we considered work experience for teachers. Views ranged from considering it was not necessary because teaching itself is a world of work profession, to that it needed three months, six months or over two years for teachers to be able to get a feel for the structure of the world of work. The issue was raised, however, that teachers who may need the work experience are the ones who are probably less secure and less able to step outside the classroom and attempt it. Those teachers who are likely to attempt it are probably the ones who least need it.

The related issue was how to make teacher work experience broad enough to allow teachers to see the changing societal trends within the particular industry or firm or factory in which they are working.

We reached consensus on the idea that students should have a taste of work experience in Years 11 and 12. If work experience were undertaken after finishing school, it should be in college, rather than in the break between school and college. Thus, student work experience should be undertaken with a supportive structure around it. There was not agreement within the group, however, that work experience was necessary in the college course.

Selection

We broke selection into three areas. Firstly, at the school level in Years 11 and 12, there should be some reinforcing of the process of self-selection. Mechanisms which could be reinforced include provision of information, questioning by students, and students' trying out varied experiences. In this way, students would be in a better position to determine whether they wanted to go on to tertiary education. In selection, there needs to be a balance between objective and political comparative statements on the one hand and affective and possibly less objective measures on the other. We recognise the difficulties in measuring each of these and the difficulties in combining them.

At the CAE level, we discussed the use of deferment and the use of mature age entry. The selection procedures at the Kelvin Grove Campus, where fifty students were selected this year using predominantly interviews rather than Tertiary Entrance (TE) Scores were considered. We look forward to the results of the evaluation of this trial process. We realise, of course, the costs involved in interviewing a large number of applicants. On the other hand, some of our group members expressed the view that the TE Score was the only measure necessary because affective qualities could be developed during the college course.

Pastoral support

Pastoral support for students should also continue through the college course. Students would then have someone to turn to for advice and encouragement, and most importantly, for support in the case of failure or rejection. We were unsure at what point students should be finally rejected as being unsuited to teaching; perhaps it is a different point for each individual.

TE Score

We then discussed the TE Score. Our responses ranged from holding it as it is through to reducing the necessary components, so that instead of five subjects being necessary to calculate it, three might be necessary. It was also suggested that we abolish the TE Score because there are going to be so many flexible structures that a TE Score will be meaningless.

Post-secondary for all

We achieved consensus at the end of the meeting that post-secondary education was a possibility for all if we thought about it and worked on it. One suggestion was that twelve years of schooling should be followed by one year in the world of work and then a Year 13.

Group D
(Reporter: Cec Burn)

Registration Our main suggestion with respect to teacher registration was that the requirements should be broadened, although the group could not agree as to exactly how they should be broadened.

Experiences needed to become a teacher We discussed the question of teacher work experience within the context of considering the kinds of experience people need to become teachers. We thought that there should be some sort of a work experience in the college course, but we could not agree on exactly where it should be put in the course. However, work experience per se is not the main thing. It is how the experience is used which is most important.

Selection The requirements for admission to a teaching diploma should be something more than just the TE Score. But just exactly what more? Should it be an interview? If it is an interview, what characteristics should be considered? In relation to mature-age entry, the experience of one campus of the Brisbane College of Advanced Education in which mature-age entrants comprise up to 25 per cent of the students in some courses is interesting. These mature-age students are apparently experiencing a fair degree of success.

We conclude with three small points. Firstly, if schools are preparing students for transition to work, perhaps the teachers colleges and the universities would not have much more to do.

The second point was that interesting people make interesting teachers or good teachers irrespective of their background. For instance, one teacher is broadening his experience by being involved in genealogy.

Finally, a question: as a parent, how would you react if your child was taught by a teacher registered under less stringent guidelines?

Group E
(Reporter: Margaret O'Donnell)

Practical difficulties of teacher work experience Our group turned its attention first to some of the practicalities of organising work experience for teachers. There are some difficulties which would have to be overcome at the start. Some of those relate to legal questions, and to the attitude of unions to having a large body of teachers actually working as opposed to observing. Various industrial and award questions would need to be resolved. As far as teachers in government schools are concerned, there would be the staffing and budgetary questions: Who is to replace all the teachers when they go out on their work experience and how is it to be paid for? Bearing in mind the present economic circumstances and those which seem likely to pertain in the future, we concluded that it probably would not be work experience that the bulk of teachers could go to, it would only be work observation. And probably then only for short periods of time. The idea that a large proportion of the teachers in government schools could go out for twelve months at a time seems fairly unrealistic just at present.

Which staff should participate We turned our attention then to consideration of which members of the staff it would be most advantageous to send on work experience or work observation. There was a great deal of discussion on this topic and a great divergence of opinion. Some people felt that we should ultimately send all teachers if the purpose of work experience was to gain a better understanding of life roles. However, at the other end of the scale, some people felt that the most important ones to send were those who were in a position to influence what went on in the school after they came back. That led us to discussions about whether it should be members of the administration (deputy principals and above) or perhaps subject masters. We realised, of course, that if someone from the administration goes on work experience, he or she is not going to be able to work at the same level in a firm. There might be a certain amount of resistance on their

part, for example, in going to a large department store and finding they had to work on a check-out.

We then considered subject masters. Should subject masters, in what can be loosely defined as the practical subjects such as commercial and manual arts be the only ones to have work experience? It is difficult to decide which subjects are "practical" however. Mathematics and science, for instance, can be very practical.

Benefits of teacher work experience

There was a considerable discussion in our group about what is it that would be inherently different from working out of teaching to working in teaching. Some people felt that the human relationships were different in teaching: that the staff room was a different place to the lunch room in a workplace, but nobody offered us any proof of that. Is work experience or observation the best way of obtaining the benefits which can be gained from it?

Alternatives to teacher work experience or observation

We came to the conclusion that there were other ways of obtaining the assumed benefits of teacher work experience, such as the use of community resources or involving business people on curriculum committees. Having teachers move around within the teaching service, on a somewhat larger scale than was done now, would also be valuable.

Pre-service teacher education

We looked very briefly at pre-service teacher education. Our discussion centred mainly on whether we could require compulsory work experience before entering pre-service as in the Chinese model, for example. We concluded that that was a little difficult and many student teachers and teachers did already have part-time work experience anyway.

Registration

We took a slight digression at that stage, to consider the problem of students who have returned to school at about 18 or 19 to do Year 11. By our experience, these students find great difficulty in coping through to the end of Year 12. There might be benefits of making some of the techniques used by industry trainers available to teachers who are dealing with those particular students. Alternatively, industry trainers might be able to undergo a conversion course to make them eligible for teacher registration. We noted, of course, that it is already possible to have industry personnel in the schools on an ad hoc basis.

Group F
(Reporter: Arnold Wolff)

Life roles

Our first point was that all teacher education should identify and monitor changes in curriculum needs and also changing future life roles of students. It was agreed that changes in life roles are occurring at a very rapid rate, one of the reasons for this being technology. Perhaps this should be a very important element within any pre-service and in-service education, i.e. the effects that technology has on life roles. It is possible that teachers may not identify very clearly with the changes that are taking place because they are divorced from it. In relation to unemployment, for example, teachers are in a very secure position and therefore do not feel threatened by it as perhaps their students are.

Life roles in secondary education

Another area in which teacher education could play a role is in helping to overcome the conflict between the subject-centred nature of secondary schools and the school's role in preparing students for future life roles. The secondary school teacher is perhaps in quite a different situation from other teachers. The primary school teacher's emphasis is on life roles, while the tertiary educator's main emphasis is on subject areas or academic areas. The secondary school teacher should be involved in both, but secondary schools are traditionally aligned to subject areas. There should be more of the life role aspects incorporated into the various courses. Perhaps this could be addressed by in-service and pre-service education.

Selection

In relation to selection for pre-service teacher education, we concluded quite strongly that the TE Score was far from an ideal criterion and that

other aspects such as the person's commitment to teaching, his or her attitude to children and so on should be considered.

Teacher work experience

There seems to be an impression that teaching is not work experience and that many life roles do not occur within the teaching profession and therefore teachers are unaware of them. Our view is that teaching is very much work experience and that many of these life roles which we have been discussing are involved. If we were to consider other work experience for teachers, then it was felt that there would be positive effects and negative effects. The positive effects have been mentioned - relevance and so on. Some important negative effects are related to the idea that if we require non-teaching work experience as a prerequisite for entry into pre-service teacher education courses, then we are asking people to commit themselves to two careers - a career of work outside teaching and then teaching. If a person is involved or is interested in becoming a teacher, then his or her interest will not be in the other area. Another aspect of this is that if they fail in the non-teaching work experience, do they then become teachers?

Teacher self-education

We felt that teachers themselves will have to recognise the changes needed in their teaching and the schools generally. Having recognised the needed changes, they will have to educate themselves and they will have to inform politicians and the community of their needs.

Registration

The question of whether a teacher should be registered only once in his or her lifetime was raised.

Group G
(Reporter: Ken Gilbert)

We considered a number of questions on the program and much of the outcome of our discussions has been the production of more questions.

Mature-age student teachers

One of our members had some experience of quotas being placed on the number of mature-aged work-experienced entrants to teacher education. The group decided to ask the question "Was that true?" If it was true, we felt it operated against desirable trends in secondary education. We could, nonetheless, see some reasons why a quota may be imposed. Some mature-aged work-experienced applicants may not be as good as people who were not mature-aged or work-experienced.

TAFE teacher preparation scheme

We discussed the TAFE teacher preparation scheme as we had two members of TAFE in our group. We asked whether that type of teacher preparation program, which involves bringing work-experienced people into the teaching force in TAFE, could be extended into the secondary area.

Leave for work experience

We raised the question about unpaid leave so that practising teachers could gain non-teaching work experience. We wanted some information about the present leave system. In particular, is it flexible and liberal enough to allow for teacher unpaid leave without any particular change?

Second jobs

The present Public Service regulations do not allow second jobs. We felt that teachers could use a second job to gain valuable work experience. This might require some change to Public Service regulations.

Pre-service teacher preparation

We had a discussion about whether pre-service teacher preparation courses are too vocationally oriented towards teaching and whether they could be more liberal and general in their emphasis. We thought that pre-service teacher education courses could focus on preparation for a number of life roles and events.

Group H
(Reporter: Ray Barrett)

Our discussion was based on the premise that the existing framework of secondary schools would be maintained. We considered education's role in preparing students for adult life, of which work is but one aspect. We include working for voluntary organisations or for clubs, self-help activities such as work co-operatives and so on, as well as paid employment in our definition of work. These types of activities could be seen as alternatives to government agencies. In considering work, attitudes and values such as job satisfaction are very important.

In-service

In-service teacher education must fit within a set of priorities which take into account teacher work load and student and societal expectations of teachers and schools. There are socio-political and economic as well as educational objectives competing for places in the hierarchy of priorities. In-service education for teachers and preparing students for the world of work must be placed within the set of priorities. At the school level, school goals are very important to the character of individual schools in setting directions.

Preparing for work

In preparing students for the world of work, the development of human relationship skills are important, but realistic expectations for their development should be set. Secondary schools should concentrate on vocational awareness rather than specific vocational training. The skills involved in preparing for work are intellectual skills and should not be seen as lower level skills. An essential prerequisite to preparing students for the world of work is that teachers realise they are teachers of students rather than teachers of subjects.

Teacher work experience

There should be opportunities for teacher work experience and the leave necessary to participate in short-term or long-term schemes.

In-service models

In-service models, to cover these needs, should be dynamic to deal with changing situations. They may include in-service education for principals or classroom teachers. They should look at the organisational factors within the school as well as the teaching strategies for individual students. Finally, in-service education cannot be considered in isolation from pre-service education.

Group I
(Reporter: Ron Edwards)

Student work experience

In terms of work experience, the group was generally concerned that work experience did not just become a catch cry or a fad, but a necessity to meet the changes in society and hence changes in the curriculum. We raised the issue of student flexibility. By this we mean the ability to handle situations from the real world rather than the ideal ones encountered during formal education. The idea of bringing real-life experiences into the schools needs to be incorporated into the curriculum.

Selection

We considered that the TE Score plus interview would be a useful selection device. The interview should cover aspects such as personality, desire to teach, liking for children and so on. We were concerned, however, that ways need to be found to make the interview more valid and reliable.

Community studies

An issue we considered was the desirability of building community studies into the teacher education curriculum. Field studies in the community would assist students and teachers to gain some life experience.

Teacher work experience

Returning to work experience, we felt that this was a desirable component of in-service teacher education. It is not necessary for all teachers to have work experience as part of their in-service education. Mature age entrants to the teaching profession, for example, often already have considerable work experience. The question of leave for teachers to undertake work experience needs investigation.

Group J
(Reporter: George Berkeley)

We discussed, essentially, the question of work experience for teachers. It was interesting that all but two of the group of nine or ten had held jobs other than teaching at some stage of their careers, and that is a higher proportion than reported in the Board of Teacher Education's research. It raises the interesting question - "Are teachers as cloistered as we might expect that they are?"

Work experience

We discussed firstly the question of how desirable it is that people have work experiences as a background to teaching. Our group did not say that it was essential that this happened, but certainly saw it as being desirable.

Benefits of teacher work experience

We then looked at what might be some of the values inherent in work experience for teachers. The broadening of experience assists teachers to make their teaching more relevant. It extends the contacts of teachers. It is sometimes said that teachers are a very cloistered group, that they mix with other teachers, and therefore they are very limited. Certainly working in non-teaching occupations would help overcome that.

One person brought up the necessity for a break. After a long period of teaching teachers are ready to tear their hair out. So not only would working outside teaching extend a teacher's experience, but it would be a professional refreshment and a break away from direct contact with children. Teachers should return to their task in a much better frame of mind.

One member of our group raised the point that many students regard teachers as having had very narrow experience. If it were common for teachers to have had work experience, then this might improve their credibility with students when they are talking about the world outside. In addition, real work experience would give teachers a better background against which to give advice about vocations.

Difficulties with teacher work experience

There are a number of issues that we did raise, however, even if it is accepted that work experience is a valuable part of either teacher preparation or a teacher's continuing development. Firstly, can such experience be real. Just as there are difficulties in making student work experience real, so the same is true for teachers. We questioned whether teachers can gain real experience in a six or twelve month period.

Is there a demand? Do teachers themselves feel the necessity? There were some questions raised this morning which indicated that there did seem to be a demand. Our group was not sure how many teachers saw non-teaching work experience as really necessary.

We discussed the question of whether non-teaching work experience should be in-service or pre-service or both. We were divided on this and could see values in either.

Alternatives to work experience

We then considered whether there are alternatives to work experience for teachers for bringing about some of the desirable changes that we discussed this morning. The use of community resources may well be a meaningful substitute for teachers who have worked in the workforce.

Registration

This relates to teacher registration. In other words, it might be more effective to bring in the expertise that exists in a community rather than sending teachers out to work for twelve months.

In-service

We also discussed the idea that it might be more valuable to concentrate in-service activities on preparing teachers to developing better human relationships in their students. If, in fact, teachers had a limited academic kind of preparation, then they may not be properly equipped to do some of the tasks that we discussed this morning, including developing human relationship skills.

80

Changing nature of work

We also need to take into account the changing nature of work itself, as Don Anderson mentioned this morning. It seems that there is an assumption when we talk about work experience for teachers that the nature of work is immutable; that work is something that all people will be engaged in, that it is paid, and that it will occur in a place of work. Yet all of the things that Dr Anderson referred to in discussing the implications of technological change suggest that work in the next few decades might be very different and that there might not be much value in our having worked for a couple of years in a workplace.

Adjuncts to teacher work experience

We then turned the discussion to the adjuncts of a teacher work experience program. Our group saw that there would need to be a guarantee of the return to the position; there would need to be financial security, in other words, the continuation at the same salary level; there is need to have liability aspects covered; it would need to be voluntary and it would need to be more than just work observation if it were going to be valuable.

Group K
(Reporter: Michael McDonald)

Registration

We came to a fairly strong agreement that the requirements for teacher registration should be relaxed. We felt, however, that instead of looking at changes in requirements for teacher registration, there might be other ways of allowing for people with particular expertise to teach in school.

Outside experts

We realised that speakers with expertise were already invited in to the schools, either in a particular lesson time or for extended periods of time. In relation to that, we must consider the reasons why outside experts are brought in. It seems that a good reason is that people with experience in the world of work can help to bring about some of the desirable changes in schools which we talked about this morning. We felt, then, that the structure and flexibility of the school was more important than the relaxation of teacher registration requirements.

Special course

We did, nonetheless, look more specifically at the area of teacher registration. There were several differing points of view voiced in our group. Registration, we felt, required two things: expertise and qualifications. Outsiders often have the expertise in teaching in areas related to life skills but do not necessarily have the qualifications. So, the question becomes more one of changing the methods of gaining the qualifications. Instead of the mature age person doing a three-year course, our group raised the possibility that, for certain mature age people, a one-year period of training would be sufficient.

Experts in residence

Finally, we discussed the idea of "experts in residence". These would be people who have particular expertise and are able to be involved in the school, possibly in a redefined or expanded teacher aide role. This type of person is involved with the teacher in the classroom, but he or she is not a registered teacher.

Group L
(Reporter: Geita Brietenbach)

Life roles

One of the issues which we discussed was that of preparing students and teacher trainees for life roles. We thought that that was a very wide area and that an investigation was needed. The Board of Secondary School Studies should be involved in this investigation. This would have definite implications, particularly for school curriculum.

Teacher work experience

There is a general assumption that most teachers have had little or no work experience. Our group challenged this. We felt that most teachers have had some kind of work experience, either part-time work experience when they were student teachers or between school and college. Work experience in some form or another is desirable for most teachers, because it can lend authenticity to what they are teaching the students

at the school. It is a link between the practical side and the theoretical side. It helps teachers to inform their students of the practical usefulness of the things they learn in school.

Teacher contact with student's home

One of the main ways which we thought that in-service teacher education could help was in dealing with student discipline problems. The teachers could visit the home of the particular refractory student to see just exactly what the background of that student is. It would not be an overnight solution to a problem. It would probably require many visits to come to an understanding of the problems and eventually to find a solution.

Work programs

Allowing teachers to write their own work programs and including in them a section on preparing students for life role skills would force teachers to recognise the relevance of their subjects to those particular skills. It would make teachers think in terms of a more practical situation where their subject is really relevant to the students in their future life.

Pre-service

We felt that a more practical course would be valuable for student teachers. This would involve, for example, an English curriculum student going to a community centre and helping students there to develop their literacy skills, rather than just going out to practising school for a few weeks. It would perhaps involve two days a week or two half-days a week.

Selection

For pre-selection for teacher trainees, it would be very useful to have an interview at the beginning to just sift out students who were, at that stage, very undesirable. The point was made, however, that it would be very difficult to reject students simply on the basis of attitude at that early stage because they might mature during their course of teacher education. This would be particularly true of the younger students coming straight from school to college.

Registration

It would be difficult to relax totally the registration requirements for teachers coming on to the staff of a school. Teaching qualifications could not be totally disregarded. A system where people could be employed for particular tasks could be implemented. For instance, if someone had a particular expertise in entomology, he or she could come into a school and teach a whole unit and be paid as a teacher.

OVERVIEW OF CONFERENCE DISCUSSION

From the group discussions emerge a number of suggestions as to how secondary schools might better prepare students for adult life and work and, in turn, some possible implications for teacher education. These suggestions have been organised below into a framework which starts with comments on the context within which the students of today will live and work. The purposes of secondary education and the skills and attitudes felt desirable in students are then considered. The changes needed in both the curriculum and the structure of secondary schools to help develop these skills and attitudes, and the implications for teacher education of these desirable developments in secondary education are discussed.

THE CONTEXT

In considering the work context, most of the conference discussion was related to the impact of technological change on future work and life patterns.

Conference participants considered that one effect of technological change will be to reduce the proportion of time during their lives in which people will be engaged in paid employment. This will happen in two ways. Firstly, the standard number of working hours per week will be reduced. Secondly, the working life of a person will most likely be shortened because of early retirement. If the trend towards increasing unemployment continues, it can be seen that work will occupy a much smaller place in society, certainly in terms of the total number of hours the average person will spend working in a lifetime. With decreased working time, there will be a concomitant increase in the amount of leisure time which people have available.

Another impact of technological change is likely to be a shift in the types of occupations in which human labour is used. More importantly, there may be large shifts, over relatively short periods of time, in the type of occupations needed in society. An increasing proportion of workers, therefore, may need to change careers one or more times during their working lives. Some workers will need to be retrained, possibly several times, after their entry into the workforce.

The employers warned of the effects of technological change on unemployment. With labour costs steadily rising and the cost of technology continually falling, employers were turning to computers to undertake tasks previously carried out by human workers. Thus, the pool of people from which future employees could be chosen was increased so that employers are able to pick the best school leavers available. As a result, the bottom third of school leavers often have great difficulty in gaining employment.

One group questioned the widely-held belief that technological advances will mean that workers will need to be better educated and have higher level skills. The group felt that only a small minority of workers would need to have higher skills while the majority would in fact work in less skilled occupations. This point, however, is not clearly established.

PURPOSES OF SECONDARY EDUCATION

Given that, in the future, work will occupy less time in people's lives, conference participants argued that the schools had a broader role than just preparing students to take their place in the workforce. It was generally agreed that education should be a preparation for all aspects of life including work and leisure. Moreover, because of the likelihood of the person's changing his or her vocation during a lifetime, the teaching of highly specific job skills in schools was not supported.

The conference came up with a number of suggestions for the types of skills and attitudes which should be fostered in students during secondary education. Some groups used the broad terms life skills or survival skills as indicators of the attitudes and skills which should be developed in students. The life skills most often mentioned were literacy, numeracy, communication skills and skills in human relationships. The development of student self-respect and self-esteem were mentioned by more than one group. Less often mentioned, but still seen as important by some, were manual dexterity, politeness and attitudes towards work.

Some groups did not concentrate on specific skills but took a broader view of the type of person which a secondary education should seek to develop. Indeed, one group questioned whether it was possible to specify the essential skills and attitudes people in our society will need, especially given that we are facing an uncertain future. It was also suggested that, instead of specifying certain skills as essential, it was most important to teach students how to learn and how to think so that they could adapt to changing circumstances. Similarly, another group claimed that the development of an autonomous person who has an awareness of himself and the world around him and was capable of making decisions was more important than concentrating on the development of specific skills and attitudes.

THE NEED FOR CHANGE

It was felt that some features of the current pattern of secondary schooling inhibited the achievement of the purposes outlined above. The present structure was seen as having two particularly undesirable features - streaming and certification.

It was pointed out that students, although often in a hidden way, go through school in streams. Moreover, streaming often starts very early in a pupil's school life, even as early as Year 2, and the problems of streaming need to be attacked there. Streaming was seen as undesirable because it had the effect of labelling students with lower stream pupils often viewing themselves with low self-esteem. Once in a stream, it was difficult for students to change and so the label tended to stick throughout their schooling.

The need to have a certificate at the end of ten or twelve years of schooling was seen to have a dampening effect on possible changes in secondary schools. If the tertiary institutions insist on certain subjects or areas of study as prerequisites for tertiary courses, then clearly this restricts the amount of flexibility and choice able to be offered to students.

DESIRABLE CHANGES IN SECONDARY EDUCATION

Perhaps the key theme of the conference was that secondary education should be made more relevant to the future life and particularly work roles of students.

Several suggestions were put forward regarding changes in school organisation and curriculum that could be used to make schooling more relevant. If one word could be chosen to express the feeling of the conference with respect to desirable changes to schools, it would be "flexibility".

(i) Integrating school and work

More integration of the life of the school and the world of work outside the school was seen as an essential requirement for making schooling more relevant. Student work experience was mentioned as one way of achieving a closer relationship between school and work. There was some suggestion that work experience be made compulsory for all Year 10 and Year 12 pupils. It was felt, however, that work experience as it now operates is often cosmetic and artificial. A more carefully planned work experience program was needed - an essential ingredient of this being the follow-up of work experience activities in the school. Work experience would then become a more integrated part of schooling, and a meaningful aspect of the curriculum.

It was also suggested that other means were needed to promote an intensive and extended exchange between schools and the world of work.

Apart from work experience, the life of the school and the outside world could be integrated by more community involvement in schools and in school decision-making. This could be achieved, for example, by inviting community and industry representatives onto school curriculum committees. The employers suggested that an education-industry committee should be set up to examine the problems faced by youth in their transition to post-school roles.

(ii) Curriculum

In general, the conference participants considered that the current emphasis on subject-centred academic learning in secondary school was too great. There was

a need to integrate non-academic or non-traditional areas of study into the secondary school curriculum. A need was seen to introduce affective concerns, particularly human relationship training, into the curriculum. The emphasis, however, was not towards the introduction of a separate subject such as "human relationships", but on the integration of human relationships across curriculum areas. Similarly, careers education, if it were introduced, should be integrated across subject areas.

Some of the groups at the conference even questioned whether the division of learning into subjects was appropriate at all. They suggested that an integrated and interdisciplinary approach to secondary education might be better, especially for certain groups of students. In any event, it was felt that the curriculum should be made more relevant to the world outside the school or, as one group put it, secondary schooling should have more "authenticity". The teacher's philosophy was very important in achieving this. Teachers committed to the development of competencies other than academic were essential if desired curriculum changes were to come about.

It must be recognised, however, that parents and particularly employers may still value the "academic" learnings more than the non-traditional areas of study. Thus, those students whose secondary education had included a large slice of non-traditional areas of learning might be disadvantaged, for example, in gaining employment. On the other hand, one group raised the point that practical, relevant or non-traditional curricula need not be any less rigorous intellectually than traditional academic study. While this may be so, it remains to be seen if parents, employers, tertiary institutions and students with high aspirations can be convinced of it.

(iii) Alternative structures

A number of groups suggested that some alternative structures to the present secondary school might be needed if education was to fulfil its role of preparing students for life and work. These suggestions included:

- Instead of primary education of seven years followed by a secondary education of five years, alternative arrangements such as 10 years + 2 years; 4 years + 4 years + 4 years; or 3 years + 7 years + 2 years could be examined.
- The establishment of junior high schools in large urban centres might be considered. Up until the end of Year 10, all students would attend these junior high schools. After Year 10, there would be different types of senior secondary schools to allow students to specialise in Years 11 and 12. For example, one type of senior secondary school could be concerned with preparing students for tertiary study, while another would be orientated towards vocational studies.
- More use could be made of colleges of technical and further education (TAFE colleges). There should be strong links between secondary schools and TAFE colleges and there should be opportunities for students to study in both institutions simultaneously. This would require co-operation between individual secondary schools and TAFE colleges, and at a Departmental or systems level, between "technical education" and "secondary" divisions.
- Schools could be broken down into smaller units. Industry and the community would be involved in the learning taking place in these smaller units. There would be freedom for students to move between the community and the school.
- An alternative to secondary schools is the youth centre in which a diverse range of activities apart from academic learnings would be undertaken.
- Another alternative is the community college in which both children and adults learn and work together. The involvement of employers in community colleges could increase the interaction between students and the world of work.
- In the future, more learning would be done at home through the use of computers.

In any reorganisation of schooling, it was important that there should be co-operation and co-ordination among the various organisations, institutions and sectors so that an integrated approach to education was implemented.

(iv) Student decision making

One group emphasised the idea that students should learn to become autonomous by being given the opportunity to make their own decisions and to realise the consequences of their decisions. They should be allowed to make mistakes and to consider the implications of their mistakes within the supportive environment of the school.

If students are to be given freedom to make decisions, they should also be given some training in how to make choices. The development of autonomy and student choice would be facilitated by having less structure in secondary schools. It was felt by another group that the current practice whereby there is more structure in secondary schools than primary schools should be reversed. As students developed, it was argued, they were capable of making more decisions affecting their own learning and consequently needed less structure to support them. Moreover, older students might learn better in a less structured environment.

(v) Re-entry of older students

One way in which schools could become more flexible would be to allow older students who have previously left school to return to school to complete their secondary education. It was important that secondary school structures should not be so rigid as to prevent them from re-entering the system.

One possible constraint on the re-entry of older students is the hours schools are open. It is possible, for instance, that these students may wish to combine part-time work with their secondary education, or they might have family or other commitments which prevent them from attending school during the normal hours of opening. To cater for older students, schools could begin at 7 a.m. and continue well into the night. There are numerous problems to be overcome before this could happen on a widespread basis - not the least of which would be finding teachers willing to teach unusual hours.

There would, moreover, be some educational difficulties associated with having older students mixed in with younger ones. For example, would the content of subjects appropriate for younger students be relevant to older students? Would teaching methods for re-entry students be the same as for younger students? Do teachers need any special in-service training to be able to teach adult or older learners?

On the other hand, there would be potential benefits to students of regular school age in having older students learning with them. Flexible school opening hours would enable all students to combine part-time work and part-time study. Regular students would also benefit in other ways if adult students, who have spent some time in the workforce, were in the schools learning with them. The younger students would be able to get first hand information about the world of work outside the school from their colleagues who have had recent experience of it.

(vi) School environment

It was considered important that the school climate was responsive to the needs of all students. School climate was seen as particularly important in developing student self-esteem and self-respect. It was felt, however, that school climates were often too harsh and bruising, especially for the "bottom-third" of students.

A healthy school climate was fostered when an open relationship existed between students, teachers, administrators and parents. These groups could then work in a real partnership towards a clear set of goals to which they were committed.

TEACHER EDUCATION

The organisational structure of the school and the curriculum are important influences on the extent to which secondary schools are able to prepare students for work and adult life. Teachers are clearly another important influence. In considering how teacher education might make teachers more aware of how they can help their students prepare for post-school roles, the conference produced a number of suggestions concerning the selection of teachers, pre-service teacher education, in-service teacher education, work experience for teachers and the requirements of teacher registration.

Selection

There are several points in the preparation of teachers at which selection occurs. Firstly, there is selection into a course of teacher preparation. Secondly, the tertiary institution selects out those student teachers who are not meeting acceptable standards. Thirdly, employing authorities select graduates for teaching positions. The main emphasis of the conference discussion was on the first of these selection points.

At an earlier stage than these, the student must make a decision to apply for entry to a teacher education course. One group suggested that the notion of student self-selection should be reinforced in Years 11 and 12. This could be facilitated by providing students with more information about various careers and letting students try out a variety of experiences before they make a final decision. Training of students in making choices, as discussed earlier, would be an important aid to student self-selection.

Turning to selection of students for entry into teacher education courses, there was near universal agreement that the current emphasis on the Tertiary Entrance Score was unsatisfactory. Students selected on the basis of academic merit alone were not necessarily the best people to teach students life role skills.

Many groups felt that an interview should be used instead of or in addition to the Tertiary Entrance Score for selecting candidates for teacher education. Suggestions for content of the interview included attitude towards children and commitment to teaching. However, the issue of how to make the interview a valid and reliable selection device was raised. It was also noted that there are considerable costs involved in interviewing all candidates for entry to teacher education. Even given these constraints on the use of the interview, conference participants still felt that the use of the interview or some other selection device was preferable to using the Tertiary Entrance Score alone.

Some groups, on the other hand, argued that a more appropriate time to select teachers using an interview was at the completion of pre-service education. It was argued that attitudes such as commitment to teaching and attitude towards children could be developed during the pre-service course. If students were prohibited from entering the teacher education course because of inappropriate attitudes, it would be unfair to those students whose attitudes would develop over the course.

Another suggestion for selecting student teachers made by a number of groups was that the number of mature-age and work-experienced students be increased. One group claimed that the present quotas on the numbers of mature-age students should be lifted. Mature-age students would bring experiences of the workplace to both their future pupils and the student teachers studying with them at college.

Pre-service Teacher Education

The groups which discussed pre-service teacher education were quite critical of present programs. One group even suggested that most courses were irrelevant and misguided and hence should be abolished.

It was felt that present courses did not adequately prepare secondary teachers to teach the lower third of students in schools because of their emphasis on the teaching of academic subjects which were relevant only to the small minority of students who would be going on to tertiary study.

To overcome this perceived deficiency, it was suggested that pre-service teacher education courses should emphasise the teaching of life skills and human relationships

and that they should include community experience. This would require an integrated rather than subject-centred approach in pre-service teacher education.

One group suggested that pre-service teacher education could be made more relevant to preparing teachers to help pupils in their future life roles by including a wider experience with pupils than simply contact with them in the school. For example, English curriculum students could work in a community centre helping pupils to develop their literacy skills.

Again, as in the TAFE teacher education program, people from the community with work experience could be brought in to lecture secondary pre-service student teachers.

Finally, it was suggested that pre-service courses should include a work experience component to provide student teachers with practical opportunities to relate their academic studies to the future life and work roles of their students.

In-service Teacher Education

Generally, in-service teacher education was seen as having an essential role to play in helping teachers to prepare their pupils for future life roles. It needed to be dynamic and flexible to take into account changing situations in society and teaching.

Some conference participants felt that in-service education should emphasise human relationships training. This might help to balance the largely academic training teachers received in pre-service courses. Others stated that its prime function should be to allow teachers to gain more insights into the type of world in which students would live and work. In-service teacher education was only one way of achieving this, however.

Specifically, it was claimed that in-service education was necessary to help teachers provide remediation for students who were failing to gain basic life or survival skills. Another suggestion was that teachers should undertake in-depth studies of certain students, particularly those having discipline problems. This would involve visiting their homes and talking to their parents to gain a deeper insight into the problems faced by these students.

In-service education might also help teachers to write work programs which incorporated a section on preparing students for life roles. This would encourage teachers to consider the relevance of their subjects to the life roles of their students. Indeed, it was suggested that teachers should monitor changes in the likely future life roles of their students. In particular, teachers should seek to understand the effects of technology on student life roles.

Teacher Work Experience

The participation of teachers in work experience outside teaching was discussed by several groups. In general, this was seen as desirable by most of those who discussed it, although one or two groups had some reservations about its usefulness. The point was also made that teachers are workers themselves and the view that teachers know little of the world of work because they are isolated in a school is not valid.

Conference participants perceived a number of potential benefits for teacher work experience. These included:

- It would broaden the experience of teachers and make their teaching more relevant.
- It would extend the contacts of teachers outside the teaching profession.
- It would add authenticity to what the teacher is teaching, i.e. teachers would more easily be able to show students practical applications of their classroom learning.
- As well as providing teachers with a better background against which to give advice to students, teachers with work experience would be seen by the students as having more credibility to advise them about vocations.
- Work experience would provide teachers with a break or refreshment from their teaching duties.

If work experience were to be introduced, a number of issues would first have to be resolved. These include salary, guaranteed return to a teaching position and legal aspects. As with student work experience, the problem of how to make the experience more than superficial would need to be considered. Ideally, work experience should allow teachers to gain knowledge about different types of occupations, and the sociology of the workplace and to appreciate the changing nature and role of work in society, in particular the effects of technology on work. It would need to do more than just give teachers knowledge of the skills required for one occupation. The question of who to send, e.g. principals, subject masters or classroom teachers, would need to be resolved.

The range of occupations in which teachers could be usefully engaged might be quite restricted because many teachers would not have the prerequisite knowledge and skills to engage in some occupations. To overcome this, it was suggested that teachers could be involved in work observation rather than work experience. However, another group claimed that it was the experience of actually getting their hands dirty and doing the work which was important.

Another problem needing resolution is the cost involved in allowing a large number of teachers to undertake six to twelve months' work experience. This is likely to be quite high, especially if the teacher's salary is paid by the school employing authority.

Some suggestions were made for removing barriers to the voluntary participation of teachers in non-teaching work. One idea was that the public service regulations should be relaxed so that teachers would be able to take a second part-time job. Another suggestion was that unpaid leave should be more readily available to teachers to undertake twelve months' or so work experience in another occupation.

Registration

In Queensland, people employed as teachers in schools must be registered by the Board of Teacher Education. The system of compulsory teacher registration does, however, allow people without formal teaching qualifications to work with students under the supervision of a registered teacher. In addition, a school may, in special circumstances, be granted authorisation to employ an unregistered person as a teacher.

Conference participants felt that schools should be encouraged to make greater use of people who could provide a knowledge and understanding of the world of work or give a different perspective than regular teachers. One possibility would be for such community resource people to work with teachers in an expanded teacher aide role, for which teacher registration would not be necessary. Another suggestion was that a person with expertise in a particular field, say entomology, should be able to come into the school and teach a whole unit in that field of particular expertise. If the person was to have sole control of the class for the teaching of a unit, an authorisation to teach would be necessary.

Some groups suggested that registration requirements should be relaxed to allow such people to gain registration, although not necessarily teacher registration. This would allow some formal recognition to be given to the contribution of these people to the work of the school. A term suggested for these individuals was "instructors". Another proposal was that individuals with experience in training people in industry could undertake a short course, say of one year's duration, to become eligible for teacher registration. Industry trainers who had undertaken the short course might be of particular benefit to those students who had re-entered the school system after a time in the workforce. It was also suggested that, rather than broadening registration policy as outlined above, account might be taken of certain non-teaching work experience when assessing eligibility for registration. Such applications would be treated on an individual basis, although broad policy guidelines could be established. In any event, the conference certainly did not endorse granting registration to applicants on the basis of non-teaching work experience alone.

MAJOR POINTS OF AGREEMENT

While there were differences of opinion on some matters, a comparison of the group reports indicated there was general agreement among conference participants on the following points:

(a) Secondary Education

1. Education needs to become more relevant to students' future life roles.
2. More emphasis should be given to non-traditional areas of study in secondary schools.
3. There should be more interaction between schools and the community and the world of work.
4. Alternative organisational arrangements to secondary schools should be examined.
5. Schooling should be more flexible, for example, in terms of hours of opening and types of learning undertaken.
6. Education should not be seen as finishing at the end of schooling but opportunities for continuing or lifelong education should be provided.
7. The environment of schools should be less harsh and schools should move towards being adaptive.

(b) Teacher Education

1. Teachers should be aware of the effects of technological and societal change on the life roles of their students.
2. The criteria for selection into teacher education should be examined with a view to broadening them.
3. Pre-service teacher education should prepare teachers to make their teaching more relevant to their students' future life roles.
4. This should also be continued in in-service teacher education, which was seen as being essential.
5. Teacher work experience is desirable, although there are difficulties in implementing it and making it meaningful.
6. It is highly desirable that people with experience in the world of work come into the school to share their experiences with the students.

AREAS FOR FURTHER DISCUSSION AND INVESTIGATION

These points of broad agreement, together with specific suggestions put forward during the conference, raise a number of questions which merit further consideration. These include:

- What curriculum, school structures and teaching methods are appropriate for older students re-entering the system?
- What are the practical difficulties involved and the potential benefits and negative effects of experimenting with various school structures, e.g. flexible hours of opening, classroom organisation, timetabling, subject orientation?
- What different organisational arrangements might be needed to cater for the diverse needs of students? For example, youth centres, technical and further education, senior secondary schools and technical schools may all have a place in the education system, with different students opting for different institutions.
- How can non-traditional areas of study be introduced into the curriculum? Will students, parents and employers regard non-traditional areas of study as being of equal value to traditional academic learning? Is it important that non-traditional areas of study be seen as being of equal value?
- What level of community involvement should there be in schools?
- How can community involvement in school decision making be increased?
- If selection for tertiary entrance is based on criteria other than the Tertiary Entrance Score, which criteria should be used? What is the relationship of these other criteria to "good" teaching? If an interview or other instrument is used, how can it be made more reliable? What are the costs involved in using selection criteria other than the Tertiary Entrance Score?
- How do the college experiences of mature age entrants to teacher education courses compare with students coming straight from secondary school? Do

mature age entrants make "better" teachers, particularly with respect to the extent to which they are able to relate their teaching to the world outside the school?

- How should students be selected for teaching positions on completion of their pre-service course?
- Is the pre-service teacher education curriculum aimed at preparing teachers to teach academic subjects suitable largely for students in the upper ability range, or does it take into account the needs of school students with differing abilities and interests? What types of experiences in pre-service courses could be used to show student teachers how to make their teaching more relevant to the future life roles of pupils?
- How can in-service teacher education help teachers to develop an appreciation of the future life roles of their pupils and make their teaching more relevant to these?
- What are the benefits and problems associated with teachers working in occupations other than teaching? How can teacher work experience become broad enough to allow teachers to appreciate the changing nature and significance of work in society? Do students perceive teachers with work experience as being better at relating their teaching to the student's future life roles than teachers without work experience? Which teachers should undertake work experience and in which types of occupations should they work? Which particular non-teaching work experiences are the most useful for teachers back in the classroom? What are the alternatives to teacher work experience? Should work experience form part of the pre-service teacher education program?
- How can individuals with experience in the workforce but without the necessary qualifications play a more active part in students' learning? Can a special course of say one year's duration be devised for these people to make them eligible for teacher registration?

The above questions represent the main issues arising from the conference, but it is recognised that there are many more questions which could also have been considered. While the conference suggested solutions to a number of problems, in many ways it raised more questions than it answered. But raising the questions is often more important than answering them.

SECTION 6

CONCLUDING COMMENTS

CONCLUDING COMMENTS

The most significant outcome of the conference was the consensus that emerged that schools should not teach for specific job skills but should look to developing in students the complete person - individually, socially, academically and vocationally. This premise is reflected in the Board of Teacher Education's research and is referred to by such writers as Karmel, Campbell, and Anderson, and in reports by the Select Committee on Education in Queensland, the Schools Commission, and the Curriculum Development Centre's Core Curriculum document. The Queensland Review of School-Based Assessment (ROSBA) stressed the importance of introducing into the curriculum aspects which would enable schooling to be more closely related to students' future life roles. A primary focus of this new orientation for secondary schools in Queensland is the interrelationship between the student and his world. With the implementation in Queensland secondary schools of the ideas contained in the ROSBA report and the inclusion of ROSBA considerations in teacher education courses, it is to be hoped that a more meaningful schooling and work relationship can be formed and that this relationship will be based on firm foundations.

Another area of agreement concerned the desire to relate schooling and work more closely. To illustrate: a large percentage of teachers in the Board of Teacher Education's survey wanted more visits to their classes from people involved in the world of work and this was endorsed by the conference. Most of the writers (with some modifications in the case of Crittenden) start from the assumption that schooling and work should be closely related. Many steps have been taken in this direction in Queensland secondary schools, and provision already exists to allow those with expertise in a particular field to share their knowledge and experience with students. The provision of transition education is also increasing rapidly in Queensland, whereby the Department of Education (and some private employing authorities) are taking the initiative for bringing students in closer contact with the realities of work. In addition, in link courses, secondary students can take some of their courses in a college of technical and further education. These, added to other measures like vocational education, work experience programs, career education and vocational counselling, help to ensure that the school-work interface will be a meaningful one.

Both the research and the conference stressed the notion of flexibility in which longer hours of opening and flexible timetabling would allow for more interaction with the community. Conference participants identified similar problem areas as did the survey, but felt that the practical, organisational difficulties (e.g. finding teachers willing to work unusual hours) would be outweighed by the educational benefits accruing to both students and teachers.

Again, the conference urged flexibility in the organisation of secondary schooling in an endeavour to meet more adequately the needs of the more mature students. Whether this could best be achieved by a separation of "senior high schools" from "middle schools", by the creation of new institutions such as "community colleges" or by the development of centres or units within existing high schools, participants endorsed the arguments from the literature and the keynote address for senior students to be given greater freedom and autonomy as young adults instead of being handled in the same way as younger secondary pupils.

Another area where the details have not yet been worked out but where there was significant agreement was in teacher work experience as a component of either pre-service teacher education or in-service professional development. It would appear that the rhetoric concerning teacher work experience needs to be translated into practical terms if this activity is going to contribute to the on-going improvement of relations between school and work.

Clearly, while significant advances have already been made in relating secondary schooling more closely to the future adult work and life roles of the student, there is a general consensus that much more remains to be done. Similarly, while increasing attention is being given to this aspect of schooling in the pre-service preparation of secondary teachers, further developments in secondary teacher education are largely dependent on future directions in secondary education.

Questions concerning the curriculum and organisation of secondary schooling such as those raised in the literature and in the conference discussions need urgent answers so that a concerted approach may be mounted by all concerned in endeavouring to meet

the educational needs of our young people. Only then can the implications for teacher education be drawn with sufficient clarity to allow tertiary institutions to develop new pre-service courses which will prepare teachers for service in the secondary schools of the future.

APPENDICES

APPENDIX 1

LIST OF CONFERENCE PARTICIPANTS

Mr Len Amos, Queensland Institute of Technology
Dr Don Anderson, Australian National University
Dr Fred Annesley, James Cook University of North Queensland
Mr Herman Anthonisse, ALP Education Committee
Mr Ken Appleton, Capricornia Institute of Advanced Education
Mr Ray Barrett, Toowong State High School
Dr Sam Beavers, University of Queensland
Mrs Maureen Bella, Board of Teacher Education
Mr George Berkeley, Department of Education
Mr Ray Best, Queensland Association of TAFE Principals
Mr Gary Birch, Modern Language Teachers Association
Mrs Monique Bond, Queensland Gifted Childrens Association
Mrs Jill Borthwick, University of Queensland
Mr Grant Bransgrove, Mount Isa State High School
Ms Charmaine Brayley, University of Queensland (Student)
Ms Geita Brietenbach, University of Queensland (Student)
Mr Peter Briggs, Association of Catholic Secondary Schools of Queensland
Mr Darcy Bron, Darling Downs Regional Education Office
Mr Hugh Brown, Stanthorpe State High School
Sr Noela Burn, Lourdes Hill College
Miss Northa Burnett, James Nash State High School
Mr Cec Burr, Holland Park State High School
Mr Arthur Butler, Rockhampton Grammar School
Mr Terry Byrne, Warwick State High School
Bro. Ken Cafe, Padua College
Mr Terry Callaghan, Boonah State High School
Professor Jack Campbell, University of Queensland
Mr David Candy, Longreach State High School
Mrs Marjorie Carss, University of Queensland
Sr Anne Carter, McAuley College
Mr Clive Cass, Department of Education
Mr David Cassidy, Goondiwindi State High School
Mr Viv Caulfield, TAFE Development Centre
Mr Les Chadwick, Brisbane College of Advanced Education
Mr John Clark, Queensland Council of Parents and Citizens Associations
Mrs Teresa Cobb, Isolated Childrens Parents Association
Dr Colin Collins, University of Queensland
Mrs Mary Cooper, Brisbane College of Advanced Education
Mr Peter Coughlin, Mount Morgan State High School
Mr Tom Cronk, Queensland Economics Teachers Association
Mrs Jan Culla, Macgregor State High School
Mrs Mary Dale, Redcliffe State High School,
Mr Bob Darnie, Darling Downs Regional Education Office
Mr Ron Day, Aspley State High School
Ms Patricia Deasy, MIM Holdings Ltd
Mr Gordon Devereux, Queensland Career Education Association
Mr Bill Donnelly, Chinchilla State High School
Mr Greg Duck, Board of Teacher Education
Mr Bob Dudley, Board of Secondary School Studies,
Mr Leo Dunne, Federation of Parents and Friends Associations
Mr Ron Edwards, Retailers Association of Queensland
Mr Jim Ettershank, Board of Advanced Education
Professor Glen Evans, University of Queensland
Dr Jim Farrell, Brisbane College of Advanced Education
Mr Des Fogarty, Federation of Parents and Friends Associations
Mr Jim Folbigg, Bank Education Service
Ms Beverley Fox, St Margaret's College
Mr Neville Fry, Board of Teacher Education
Mrs Kay Galton, Centenary Heights State High School
Mrs Jocelyn Gardener, Brisbane Western Suburbs Education Centre
Mr Clarrie Garnsworthy, Queensland Confederation of Industry
Mrs Sheila Geise, Australian College of Education
Mr Ernie Gehrke, Department of Education

Mr Ray Giesse, St Paul's School, Bald Hills
Mr Ken Gilbert, Newmarket State High School,
Mr Pat Gill, Queensland Teachers Union
Mr Jim Golding, Chairman, Board of Secondary School Studies
Mr Bill Green, Queensland Council of Parents and Citizens Associations
Mr Garnet Greenbury, Queensland Association of Mathematics Teachers
Ms Jenny Haddrell, Newmarket State High School
Mr Peter Halcomb, G.J. Coles and Co. Ltd
Dr Bill Hall, Brisbane College of Advanced Education
Mr Bill Hamilton, Deputy Director-General and Chairman, Research Committee, Board of Teacher Education
Mr Tony Harland, ANZ Bank
Dr Vince Hart, University of Queensland
Mr Bill Heath, Queensland Council of Parents and Citizens Associations
Ms Judy Hempel, Queensland Association of Mathematics Teachers
Mr Ray Hibbins, Brisbane College of Advanced Education
Mrs Ruth Hicks, Clayfield College
Ms Lyn Hill-Weber, Queensland Council of Parents and Citizens Associations
Dr Ted Hobbs, Research Branch, Department of Education
Mr Alan Hobson, Brisbane-North Regional Education Office
Mr George Holmes, Seven Hills College of TAFE
Mr Ted Hook, Queensland Economics Teachers Association
Ms Jenny Hughey, Queensland Teachers Union
Miss Diane Hungerford, Townsville State High School
Mr Chris Jackson, Commercial Teachers Society of Queensland
Mrs Andrina James, Australian College of Education
Mr Arthur Johnson, Rangeville State School
Mr Graham Jones, Central Regional Education Office
Ms Prue Karmel, Schools Commission
Miss Audrey Lawrie, Queensland Institute of Senior Education Officers
Ms Bronwyn Lawry, Transition Education, Department of Education
Mr Bob Leach, Brisbane College of Advanced Education
Mr Cliff Lee, Bank Education Service
Ms Pat Lee, Queensland Association of Teachers in Independent Schools
Mr Jim Leech, Department of Education
Mr Col McCowan, Transition Education Resource Unit, Department of Education
Mr Michael McDonald, Catholic Education Office
Ms Merrill McKenzie, Brisbane College of Advanced Education (Student)
Mr Scott McKenzie, Department of Education
Mr Ian McLaren, Warwick State High School
Mr Ian McLean, Trades & Labour Council of Queensland
Dr Marilyn McMeniman, University of Queensland
Mr Ross MacKee, James Cook University of North Queensland and Chairman, Board of Teacher Education
Sr Mary Mackintosh, Catholic Education Office, Rockhampton
Dr Ian Macpherson, Geography Teachers Association
Mr Jim Madden, Brisbane-West Regional Education Office
Dr Phil Meade, Brisbane College of Advanced Education
Mr John Merritt, Queensland Council of Parents and Citizens Association
Mr Peter Meere, McAuley College
Mr Bob Miller, Federation of Parents and Friends Associations
Dr Laurie Miller, University of Queensland
Mr David Mitchell, Division of TAFE, Department of Education
Ms Joan Morahan, Cavendish Road State High School
Mr Ray Mullins, Cavendish Road State High School
Ms Sylvia Napier, Brisbane-South Regional Education Office
Mr John Nash, Brisbane-West Regional Education Office
Mr Fred Nelson, Mathers Shoes
Sr Patricia Nolan, McAuley College
Mr John O'Connor, Transition Education, Department of Education
Ms Trish O'Connor, Curriculum Branch, Department of Education
Mrs Margaret O'Donnell, Woodridge State High School
Mr Ian Patterson, Brisbane College of Advanced Education
Mr Ron Pearce, Department of Education
Mr John Pitman, Board of Secondary School Studies
Mr Neal Pokarier, Macgregor State High School
Mrs Margaret Ramsay, English Teachers Association of Queensland
Ms Dell Randall, Darling Downs Institute of Advanced Education

Mr Bob Rasmussen, Warwick State High School,
Miss Esme Robinson, English Teachers Association of Queensland
Miss Fay Russell, Senior Mistresses Association
Mr Ross Sedgwick, The Southport School
Mr Basil Shaw, Brisbane College of Advanced Education
Mr Eric Shaw, MLA
Mr Jeff Shepherd, Ayr State High School
Mrs Nancy Smith, Clayfield College
Mr Graham Sprott, Pine Rivers District State High School
Mr Bob Stevenson, Curriculum Branch, Department of Education
Mr John Stewart, Darling Downs Institute of Advanced Education
Ms Margaret Svindell, Queensland Institute for Educational Research
Mr Don Tanner, Cavendish Road State High School
Ms Maureen Thurbon, Federation of Parents and Friends Associations
Mr Laurie Topping, Transition Education, Department of Education
Mr Ken Townsend, Queensland Manual Arts Teachers Association
Ms Helen Tredrea, James Cook University of North Queensland (Student)
Mr Peter Varley, Queensland Institute for Educational Research
Mr Alan Walpole, Lourdes Hill College
Mr Bill Watts, Metropolitan Permanent Building Society
Mr Lee Wells, Warwick State High School
Mr Jerry West, Chinchilla State High School
Mr Len Whear, Metropolitan Permanent Building Society
Mr Ian Whelan, Capricornia Institute of Advanced Education
Mr Doug Wilson, Warwick State High School
Mr Les Winkle, Department of Education
Mr Arnold Wolff, Brisbane College of Advanced Education
Mr Bill Yarrow, Queensland Intersystemic Parents Committee
Mr John Young, Kepnock State High School

APPENDIX 2

BOARD OF TEACHER EDUCATION

QUESTIONNAIRE

WORLD OF WORK PROJECT

Col. 1-3
Col. 4=1

1. Sex: Male 1 ☐ Female 2 ☐ Col. 5

2. Age:
- Less than 25 1 ☐
- 25 - 30 2 ☐
- 31 - 40 3 ☐
- 41 - 50 4 ☐
- 51 - 60 5 ☐
- Over 60 6 ☐

Col. 6

3. Type of school:
- Government 1 ☐
- Non-Government - Catholic 2 ☐
- Non-Catholic 3 ☐

Col. 7

4. Location of school:
- Metropolitan (including Ipswich, Gold Coast, Redcliffe) 1 ☐
- Provincial City 2 ☐
- Country town 3 ☐

Col. 8

5. Do you presently have regular teaching duties in your school?
- Yes 1 ☐
- No 2 ☐

Col. 9

6. Subjects teaching NOW:

Major curriculum area (specify only one) -

..... Col.10-11

Others -

Col.12-13

..... Col.14-15

7. Year levels teaching NOW (tick appropriate boxes):

Subject	Year 8	Year 9	Year 10	Year 11	Year 12	
.....						Col.16-25
.....						Col.26-35
.....						Col.36-45

8. Position in school: (tick one only)
- Administrator 1 ☐
- Subject Master (Moderator/Co-ordinator) 2 ☐
- Classroom Teacher 3 ☐
- Other (e.g. Teacher Librarian, Resource Teacher) - please specify: 4 ☐

Col.46

.....

9. Teaching experience:

	Less than 1 year	1-5 years	6-10 years	11-20 years	More than 20 years	
	1	2	3	4	5	
Pre-School						Col.47
Primary						Col.48
Secondary						Col.49
TAFE/Trade						Col.50
Tertiary						Col.51
Special						Col.52
Other (please specify)						Col.53

10. Initial pre-service teaching qualification:

1 year course	1 ☐	
2 year course	2 ☐	
Dip.Teach.	3 ☐	
Pre-service B.Ed.	4 ☐	
Degree only (e.g. B.A.)	5 ☐	Col.54
Degree plus Dip.Ed./ Grad.Dip.Ed./Grad.Dip.Teach.	6 ☐	
Other (please specify)	7 ☐	

.....

11. At which type of institution(s) did you obtain this pre-service teaching qualification? (More than one may be ticked.)

University	1 ☐	Col.55
C.A.E./Teachers College	2 ☐	Col.56
Other (please specify)	3 ☐	Col.57

.....

12. Where did the majority of this pre-service preparation take place?

Queensland	1 ☐	
Interstate	2 ☐	Col.58
Overseas	3 ☐	

13. Apart from your initial pre-service teaching qualification, what other qualifications do you possess (e.g. trade qualification, B.Ec., L.T.C.L., M.Ed., B.Ed.St., ...)?

..... Col.59-60

14. The following questions refer to the secondary school which you attended for the majority of your secondary school studies:

(a) Type	Government	1	☐	
	Non-Government - Catholic	2	☐	Col.61
	- Non-Catholic	3	☐	
(b) Location (i)	Metropolitan	1	☐	
	Provincial City	2	☐	Col.62
	Country town	3	☐	
(ii)	Queensland	1	☐	
	Interstate	2	☐	Col.63
	Overseas	3	☐	
(c) Mode of attendance	As a day student	1	☐	
	As a boarder	2	☐	
	As an evening student	3	☐	Col.64
	As a correspondence student	4	☐	

15. Was either of your parents a teacher?

	Yes	No	
	1	2	
Father			Col.65
Mother			Col.66

16. (a) What was your father's major occupation while you were at school (including home duties)?

..... Col.67-68

(b) What was your mother's major occupation while you were at school (including home duties)?

..... Col.69-70

17. What was the highest level of education attained by your parents?

	None	Primary	Lower Secondary	Upper Secondary	Tertiary	Post-graduate	
	1	2	3	4	5	6	
Father							Col.71
Mother							Col.72

18. Please indicate below the types of employment, other than teaching, in which you have been engaged. Indicate separately for full-time and part-time employment, also periods of unemployment. Include military service, full-time home duties and vacation employment. Give specific details of each type of employment (e.g. brickie's labourer, shop assistant) in the "Type of Employment" column. Also indicate the length of time in each type of employment in the appropriate column.

TYPE OF EMPLOYMENT	TIME IN YEARS AND MONTHS: Before completing secondary studies	After secondary studies and before teacher training	During teacher training	After completing teacher training	
					Card 2
(c) Full-time employment (inc. casual)					Dup.Col.1-3 Col. 4=2
.....					Col. 5-19
.....					Col.20-34
.....					Col.35-49
.....					Col.50-64
.....					Col.65-79
					Card 3
(b) Part-time employment (inc. casual)					Dup.Col.1-3 Col. 4=3
.....					Col. 5-19
.....					Col.20-34
.....					Col.35-49
.....					Col.50-64
.....					Col.65-79
					Card 4
(c) Periods of unemployment					Dup.Col.1-3 Col. 4=4
.....					Col. 5-19

19. (a) Is there a career officer, guidance officer or some other designated person within your school responsible for organising visits to the school from business firms, employee associations, trade unions, etc?

Yes 1 ☐
No 2 ☐ Col.20

(b) This year, how many times have you been responsible, either directly or through a careers/guidance officer, for contacting business firms, industry associations, employee associations, trade unions or any other groups in the workplace with a view to having them visit your school to talk to students in your class(es)?

..... Times Col.21-22

(c) How many of these visits actually occurred? Col.23-24

(d) What positions did these people hold, and which type of business, industry or organization did they represent?

Position (e.g. manager, personnel officer, trade union representative)	Industry/Business/ Organisation (e.g. car manufacturing, public service, A.C.T.U., Chamber of Commerce)	
.....	.....	Col.25-28
.....	.....	Col.29-32
.....	.....	Col.33-36
.....	.....	Col.37-40
.....	.....	Col.41-44
.....	.....	Col.45-48
.....	.....	Col.49-52

(e) Would you like to have more visits from employer/employee representatives to talk to students in your class(es)?

Yes	1 ☐	Col.53
No	2 ☐	

(f) How important do you think each of the following is as a constraint to organizing more visits?

	Very Important	Moderately Important	Slightly Important	Unimportant	
	1	2	3	4	
. school policy					Col.54
. finance					Col.55
. your lack of time					Col.56
. timetabling difficulties					Col.57
. unwillingness of suitable representatives to participate					Col.58
. unavailability of suitable representatives					Col.59
. lack of interest shown by students					Col.60
. lack of interest shown by colleagues					Col.61
. others (please specify)					

20. (a) This year, how many times have you taken students to visit a place of employment (e.g. factory, office)?

..... Times Col.62-63

(b) Which types of business, industry or organisation did you visit with your students?

Industry/Business/Organisation

(e.g. car manufacturing, public service, A.C.T.U., Chamber of Commerce)

..... Col.64-65

..... Col.66-67

..... Col.68-69

..... Col.70-71

..... Col.72-73

..... Col.74-75

(c) Would you like to have more visits of this type?

Yes 1 ☐
No 2 ☐ Col.76

(d) How important do you think each of the following is as a constraint to having more visits of this type? Card 5 Dup.Col. 1-3 Col. 4-5

	Very Important	Moderately Important	Slightly Important	Unimportant	
	1	2	3	4	
. school policy					Col. 5
. finance					Col. 6
. your lack of time					Col. 7
. timetabling difficulties					Col. 8
. unwillingness of suitable organisations to participate					Col. 9
. unavailability of suitable organisations					Col.10
. lack of interest shown by students					Col.11
. lack of interest shown by colleagues					Col.12
. others (please specify)					

21. This question should be answered for your major curriculum area as specified in Question 6. Please answer the question only for those year levels in which you are currently teaching your major curriculum area.

(a) In your major curriculum area, as a general rule does the curriculum adequately prepare students for the world of work?

	Yes	No	
	1	2	
Year 8			Col.13
Year 9/10			Col.14
Year 11/12			Col.15

(b) For those year levels marked YES, in what ways in particular does the curriculum prepare your students for the world of work?

Year 8 .....

.....

.....

Year 9/10 .....

.....

.....

Year 11/12 .....

.....

.....

(c) For those year levels marked NO, can you suggest other elements which be included in the curriculum to prepare students for the world of work?

Year 8 .....

.....

.....

Year 9/10 .....

.....

.....

Year 11/12 .....

.....

.....

22. Rate your level of agreement with each of the following statements. You should rate your level of agreement with each item in general. Variations in your opinions will no doubt occur for specific students or groups of students, and for particular occupations.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Un-decided	
	1	2	3	4	5	
1. Unskilled occupations should be regarded more highly than at present.						Col.16

	Strongly Agree	Agree	Disagree	Strongly Disagree	Un-decided	
	1	2	3	4	5	
2. The academic achievement level of the student should be a major factor in determining his choice of career.						Col.17
3. Students should choose the career in which they are most interested.						Col.18
4. Students should not be discouraged from entering unskilled occupations if they wish to do so.						Col.19
5. Academically talented students should be discouraged from entering the workforce immediately after Year 10.						Col.20
6. Academically talented students should be discouraged from entering the workforce immediately after Year 12.						Col.21
7. Students with a good academic record should be discouraged from choosing an unskilled occupation.						Col.22
8. A high level of academic achievement is a necessary pre-requisite for getting a 'high status' job.						Col.23
9. Academic achievement should be seen only as a general guide to career choice.						Col.24
10. Teachers should emphasize that manual work makes a positive contribution to society.						Col.25
11. Students who cannot cope with the academic school curriculum at lower secondary level should seek employment.						Col.26
12. Students who cannot cope with the academic school curriculum at upper secondary level should seek employment.						Col.27
13. It is a good idea for students to undertake some form of manual training.						Col.28
14. If time permits, it is a good idea for students to undertake paid part-time work outside school hours.						Col.29

	Strongly Agree	Agree	Disagree	Strongly Disagree	Un-decided	
	1	2	3	4	5	
15. If time permits, it is a good idea for students to undertake voluntary community service outside school hours.						Col.30
16. It is generally better for a student to commence tertiary education after Year 12 than to enter the workforce.						Col.31
17. Manual occupations should be regarded more highly than at present.						Col.32
18. Students with a good academic record should be discouraged from choosing a manual occupation.						Col.33
19. Students should not be discouraged from entering manual occupations if they wish to do so.						Col.34

23. Rate your level of agreement that each of the following should be a major aim of secondary education. In the second column indicate whether you think that, in secondary school practice in Queensland, the present emphasis in education on each aim should be increased, decreased or remain the same.

	Strongly Agree	Agree	Dis-agree	Strongly Disagree	Un-decided	In-crease	De-crease	Remain the same	
	1	2	3	4	5	1	2	3	
1. Teaching basic problem-solving skills so students are competent to solve problems in a job situation.									Col.35-36
2. Teaching students how to go about getting a job (e.g. interview, personal appearance).									Col.37-38
3. Teaching basic literacy and numeracy skills.									Col.39-40
4. Making students aware of different types of jobs/careers available and what is involved in each one.									Col.41-42
5. Helping students to understand their future role as members of the workforce.									Col.43-44
6. Helping students understand the expectations of employers.									Col.45-46

	Strongly Agree	Agree	Dis-agree	Strongly Disagree	Un-decided	In-crease	De-crease	Remain the same	
	1	2	3	4	5	1	2	3	
7. Teaching students skills that will be used directly in their jobs.									Col.47-48
8. Helping students understand how a business operates.									Col.49-50
9. Helping students understand the role of managers in a business.									Col.51-52
10. Teaching students about safety in industry.									Col.53-54
11. Helping students to gain an understanding of the training and educational background required to enter specific occupations.									Col.55-56
12. Preparing students to enter tertiary education.									Col.57-58
13. Developing in each child a sense of personal worth and esteem.									Col.59-60
14. Teaching students how to co-operate with other people.									Col.61-62
15. Helping students to gain an understanding of the type of job that they are likely to be doing.									Col.63-64
16. Assisting students to profitably enjoy their leisure activities.									Col.65-66
17. Helping students to appreciate cultural activities.									Col.67-68
18. Assisting students in forming positive attitudes towards work.									Col.69-70
19. Preparing students for the possibility of unemployment.									Col.71-72
20. Any others (especially related to students entering the workforce).									

24. (a) Do you consider teachers should spend periods of time in work experience, other than teaching, as part of their normal career patterns?

Yes	1	☐	Col.73
No	2	☐	

(b) Would you participate in a Work Experience for Teachers project in an out-of-school situation for an extended period of several months?

Yes	1	☐	Col.74
No	2	☐	

(c) If so, what area of work would be of interest to you?

..... Col.75-76

..... Col.77-78

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APPENDIX 3

RESEARCH COMMITTEE, BOARD OF TEACHER EDUCATION
(Membership during project - July 1980 to September 1982)

- Mr W.L. Hamilton (Chairman),
  Deputy Director-General of Education, Queensland Department of Education
- Mr R. Beevers,
  Senior Lecturer, School of Education, Capricornia Institute of Advanced Education
- Mr M. Byrne,
  Research Officer, Research Branch, Queensland Department of Education (from April 1982)
- Professor W.J. Campbell,
  Head, Department of Education, University of Queensland (from February 1982)
- Miss D. Dewar,
  Teacher, Kingston State High School (April to December 1981)
- Mr B. Dixon,
  Teacher, Merrimac Primary School (until December 1981)
- Dr J. Elkins,
  Reader, Schonell Educational Research Centre, University of Queensland (until December 1981)
- Mr N.H. Fry,
  Executive Officer, Board of Teacher Education
- Dr W.C. Hall,
  Principal, Mount Gravatt Campus, Brisbane College of Advanced Education
- Mr K. Jmison,
  Dean, School of Education, Darling Downs Institute of Advanced Education
- Mr A. Johnson,
  Principal, Rangeville State School, Toowoomba (from February 1982)
- Mr S. Mackenzie,
  Co-ordinator, In-service Education - Secondary, Queensland Department of Education (from February 1982)
- Mr G. Maxwell,
  Sub-Dean, Faculty of Education, University of Queensland (February to December 1981)
- Sr P. Nolan,
  Principal, McAuley College
- Mr G. Persello,
  Teacher, Marist Brothers College (until December 1980)
- Dr D. Price,
  Co-ordinator of Practice Teaching, Mount Gravatt Campus, Brisbane College of Advanced Education (from February 1982)
- Mr A. Searle,
  Principal, Corinda Primary School (from February 1982)
- Mr N. Sellars,
  Co-ordinator of Teaching Practice, James Cook University of North Queensland Institute of Advanced Education (from February 1982)

- Mr G. Streets,
  Senior Lecturer, School of Teacher Education, North Brisbane Campus, Brisbane College of Advanced Education (until December 1981)

- Mr A. Walpole,
  Teacher, Lourdes Hill College, Hawthorne (from September 1980)

- Mr M. Weier,
  Teacher, Bald Hills Primary School (from February 1982)

- Mr I. Winkle,
  Director, Division of Secondary Education (April to June 1981)

Secretariat

- Mrs M. Bella,
  Graduate Administrative Assistant, Board of Teacher Education

- Mr G.J. Duck,
  Research Officer, Board of Teacher Education